# Unlocking Potential: Key Components of Programming for Students with Learning Disabilities

ALBERTA LEARNING CATALOGUING IN PUBLICATION DATA

Alberta. Alberta Learning. Learning and Teaching Resources Branch.
Unlocking potential : key components of programming for students with learning disabilities.

ISBN 0-7785-2546-5

1. Learning disabled—Study and teaching—Alberta.
2. Special education—Alberta.
3. Exceptional children—Study and teaching—Alberta. I. Title.

LC3984.2.A3.A333 2002 371.9

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This document is intended for:

| | |
|---|---|
| Students | |
| Teachers | ✓ |
| Administrators | ✓ |
| Counsellors | ✓ |
| Parents | |
| General Public | |

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# Acknowledgements

Alberta Learning gratefully acknowledges the teachers, other individuals and groups who have provided advice and feedback over the course of the development of *Unlocking Potential: Key Components of Programming for Students with Learning Disabilities*, including the following:

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| Greg Bishop | Team Leader, Learning and Teaching Resources Branch |
| Catherine Walker | Resource Manager |
| Sandra Mukai | Copyright |

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Alberta Society for the Visually Impaired
Alberta Teachers' Association
Autism Society of Alberta
College of Alberta School Superintendents
Council for Exceptional Children (CEC), Alberta Federation

Learning Disabilities Association of Alberta
Premier's Council on the Status of Persons with Disabilities
Signing Exact English
Society for the Educational Advancement of the Hearing Impaired
University of Alberta, Department of Educational Psychology

105-05299/



# introduction

## Purpose

This resource provides concise information to assist in developing and monitoring programming for students with learning disabilities. Students with learning disabilities have the potential to be successful in school and in life. Success is highly dependent upon identifying and understanding an individual's strengths and needs, and providing appropriate support during the school years. The key components of programming described in this resource are based on research and best practices in the education of students with learning disabilities. Sample outcomes are provided for each key component. Outcomes are the results expected from implementing the suggested strategies, activities and practices.

The information presented is not intended to be exhaustive. Key issues and strategies are highlighted. Connections to other Alberta Learning resources are provided to facilitate access to more in-depth information. The bibliography includes additional resources and the appendices provide complementary checklists and teaching tools. The strategies, approaches and outcomes are targets to strive for and will be influenced by the availability of resources and practical constraints.

Programming for students with learning disabilities requires a team effort. The audience for this resource includes classroom teachers, resource personnel and administrators.

**Students with learning disabilities** have diverse, complex and interrelated difficulties, often hidden or subtle, that affect their learning across the lifespan. While there is great variability among students with learning disabilities, they are generally described as individuals of at least average intelligence who have difficulties processing information and who experience unexpected difficulties in academic areas. These difficulties cannot be explained on the basis of other handicapping conditions or environmental influences. These students exhibit strength and success in other learning and processing areas. Learning disabilities are lifelong and may be affected by the demands of the environment, so that their impact varies across the lifespan.

## Guiding Principles

- Programming must be based on an individual student's needs.
- Programming is an active process, which is continuously monitored and adjusted to meet a student's needs.
- Students with learning disabilities need to participate in the regular curriculum to the fullest extent possible.
- Many practices used to support students with learning disabilities will benefit all students.
- The key components of programming are not discrete; they are processes that work together.
- Programming:
  - involves a problem-solving process, and is dynamic, interactive and changing
  - requires consistency across settings and grades
  - requires teamwork and collaboration (student, parent, school personnel)
  - requires ongoing communication
  - requires an organizational structure and school culture that support the ongoing implementation of the components.

## Key Components of programming for students with learning disabilities

These components are not discrete. All are important to programming and work together.

1. **Collaboration** involves working together with collaborative problem solving at the heart. There are several levels of collaboration to support students with learning disabilities. It is important for parents to have meaningful involvement in the education of their children. Student involvement in all aspects of their programs enhances success and self-advocacy skills. Collaboration among school personnel, parents and students is important for identifying students with learning disabilities; providing ongoing assessment and monitoring; developing

and implementing individualized program plans (IPPs); and planning for transitions, instruction and accommodations.

2. **Meaningful Parent Involvement** in a child's education enhances the child's achievement and the parents' satisfaction with the educational programming being provided for the child. It is important to facilitate a collaborative relationship between home and school. Parents have much to offer to the identification and assessment processes. They are key stakeholders in the IPP process and in transition planning.

3. **Identification and Assessment** of students with learning disabilities is essential to ensure that appropriate educational supports are put in place. The optimal approach is early identification and assistance. However, learning disabilities are lifelong and systems for identification and assessment are needed throughout the school years. Collaboration between home and school facilitates the detection and identification of learning disabilities. A team approach to the assessment process provides multiple sources of information that contribute to the diagnosis of learning disabilities and the development of individualized program plans.

4. **Ongoing Assessment** is important for program planning and monitoring. Assessment does not end after the identification and diagnosis of learning disabilities. It is essential to all aspects of the IPP process. Ongoing frequent monitoring of student performance is important in order to gather information to use to demonstrate and communicate progress, and adjust teaching approaches to enhance success. Student involvement in the assessment process contributes to the development of self-advocacy skills.

5. **Individualized Program Plans (IPPs)** provide the framework for developing programs to address the needs of individual students. All components of programming come together in the development, implementation and monitoring of students' IPPs. IPPs require a collaborative team effort involving the student, parent, regular education teachers and resource personnel. Student involvement facilitates self-advocacy skills. Information gathered during the identification process contributes to understanding student strengths and needs, and suggests directions for instruction and accommodations. The IPP process involves opportunities for collaborative problem solving. Planning for transitions across

programs, grades and schools is also an important part of the process. The ongoing monitoring of student progress is recorded on the IPP. The effectiveness of accommodations is tracked and instructional changes are made as needed.

6. **Transition Planning** is important for students with learning disabilities. These students often have difficulty managing transitions in their lives, such as the changes involved in transitions across grades, programs and schools. Effective transitions are planned, collaborative and comprehensive.

7. **Self-advocacy** refers to taking action on one's own behalf. Successful adults with learning disabilities have identified the ability to self-advocate as an important factor contributing to success. Programming for students with learning disabilities must support the development of self-advocacy skills.

8. **Accommodations** can address many of the challenges faced by students with learning disabilities. An accommodation is a change or alteration to the regular way a student is expected to learn, complete assignments or participate in the classroom. Accommodations need to be balanced with other instructional considerations and be included in the IPP process. Accommodations are based on an understanding of student strengths and needs. They are best determined through a collaborative process and need to be monitored for effectiveness.

9. **Instruction** to facilitate learning is essential for programming for students with learning disabilities. Students will need explicit, intensive and extensive instruction that will vary with the severity and nature of the learning problems. Combining direct instruction, strategy instruction and strategic teaching is appropriate across all grade levels. Instruction is guided by IPPs and builds on individual strengths and needs. Planning, implementing, and monitoring instruction are facilitated by collaboration.

# Collaboration

No single individual has all the knowledge and expertise required to understand and meet the complex learning needs of students with learning disabilities. Collaboration is key to successful instruction, particularly for students with special needs. Essentially, collaboration is the process of working together with collaborative problem solving at the heart. Collaborative teaming can take place at many levels. Regular classroom teachers team with others in many ways to support students with learning disabilities. Given that there are constraints on time and resources in schools, it is important to consider the benefits of collaboration, including:

- increased understanding of the student through sharing expertise and diverse perspectives
- increased expertise to address a broader range of student needs
- expanded repertoire of instructional strategies for team members
- expanded ideas on how to meet a student's needs
- increased communication and consistency

- maximized instructional time through teaming and organization of personnel and resources
- shared decision making
- shared responsibility.

A problem-solving approach is the core of effective collaboration, whether the team is large or small, formal or informal. The problem-solving cycle begins with identifying and clarifying the problem. Solutions are generated and evaluated, and a plan of action is made. A timeline for implementation and a method for evaluating the plan are established. It is important to get back together to evaluate the plan. Is it working? If necessary, the problem-solving cycle is revisited. (For more information about problem solving, see Appendix 1, pages 74–75.)

## Facilitating Collaboration

The many benefits of collaboration can be realized by considering the following strategies.

- Consider organizational approaches that involve collaborative teaming and problem solving. Many names are used to describe collaborative teams; e.g., Student Assistance Team, School Resource Group. A Student Support Team Model is one formal example of an approach to collaborative teaming. (See page LD.49 of *Teaching Students with Learning Disabilities* [Alberta Education, 1996], Book 6 of the *Programming for Students with Special Needs* series.) This approach can be particularly powerful in helping classroom teachers address problems a student is encountering prior to formal assessment or diagnostic procedures. The team may consist of a school administrator, a classroom teacher, a special education teacher, a student's parent and, where appropriate, the student. The members of the team may vary at different points in the program planning process. The team comes together and engages in collaborative problem solving as described above.
- Emphasize pre-referral activities (opportunities for teachers to raise concerns about a student's progress and engage in problem solving) before there is a formal referral. Provide opportunities for every teacher to participate and receive support.

- Involve parents immediately when concerns about a student arise. Welcome parents as important team members. Recognize and respect the information they can provide about their children and their contribution to their children's programs.
- Involve the student. Students can provide important information about their learning and will be more actively engaged in their programs if they are involved in setting goals. Students learn valuable skills for self-advocacy.
- Involve administrators. Their support is essential to success. Leadership is needed to develop schoolwide acceptance of shared responsibility for the success of all students in the school. Supportive structures are necessary to organize a systematic process for collaborative program planning and ensure that there is time for collaboration.
- Designate one school-based person to be responsible for facilitating the process, seeking additional expertise; e.g., psychologist, speech and language pathologist, and for the overall organization and coordination of resources.
- Have flexible membership drawing on all the expertise in the school. Do not limit the collaboration to formal interactions of a designated team. Encourage regular collaborative problem-solving meetings for smaller teams responsible for implementing and monitoring educational plans.
- Respect the time demands on team members. Consider everyone's schedule when setting up meetings and control the time spent in meetings. Clear roles and responsibilities help team members prepare for meetings. To maximize efficiency, designate one person to facilitate the meeting, set goals and organize information. Have a clear process for problem solving and planning.
- Give team building time. To develop positive team connections, teams need time to work together. Organizational strategies that facilitate time for co-teaching, consultation and meetings will support the development of effective teams. The team will require ongoing communication strategies, such as communication books, e-mail, newsletters, etc.
- Recognize and develop expertise for ongoing problem solving and support. Specialized expertise is not always easily accessible and

building capacity is an important aspect of collaboration. Through collaborative teaming to meet the needs of particular students, team members are exposed to new ideas and solutions to problems. Consider expanding the knowledge base of school personnel through a variety of professional development opportunities, such as study groups, newsletters, internal workshops, external workshops and conferences.

- The following contribute to the success of collaborative teaming:
  - willingness to share and exchange expertise and resources
  - acceptance of mutual responsibility and accountability for key decisions, as appropriate
  - small working teams
  - clearly established roles and responsibilities
  - all members contribute, all contributions are valued
  - training and supervision for teaching assistants, volunteers and peer tutors
  - procedures for sharing observations and monitoring progress
  - regular time for planning and communication, especially if instruction is provided outside the regular classroom. (Address transition and generalization, links to classroom instruction, common language and cues for the student.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Teachers have coordinated and easy access to expertise when they have concerns about a student.

- Parents have an early, ongoing and meaningful role in collaborative problem solving to meet their children's needs.

- Students have an ongoing meaningful role in planning, implementing and evaluating their programs.

- There is flexible organization of instruction and coordination of resources to meet individual student needs.

## Connections to Other Alberta Learning Resources

See Setting up a Student Support Team and Program Planning Process Model, pages LD.49–LD.57 in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series.

# Meaningful Parent Involvement

There is now a large body of research linking parent involvement in their children's education with greater student achievement in terms of grades, student attitudes and behaviour. Meaningful parent involvement also leads to greater parental satisfaction with the educational programming provided for their children. For these reasons, building relationships to encourage meaningful parent involvement is considered one of the hallmarks of best practice among educators.

Encouraging meaningful parent involvement refers to the process of developing collaborative partnerships among parents, teachers and school administrators. Parents are key stakeholders as they know their children better than anyone, and are in a good position to reinforce the concepts and processes children learn in school. Parents should be involved in planning, problem solving and decision making where their children's education is concerned.

## Barriers to Meaningful Parent Involvement

The following barriers may hinder the development of meaningful parent involvement.

- **The attitudes, emotional reactions and abilities of parents**

  Parents' abilities to become involved in their children's education may be limited by time constraints due to employment, language barriers, or lack of knowledge or skills which may lead parents to doubt their ability to contribute. Parents may feel intimidated by educators or minimize the importance of education due to their own negative experiences. Parents who are struggling to understand their children's learning disabilities or why they are experiencing difficulty in school may deny the problem or blame the teacher. These reactions can make it difficult to develop a collaborative relationship. Parents who struggle with one or more of these factors may appear passive or reluctant to be involved.

- **The attitudes of teachers and administrators about the role of parents in the school**

  Some educators remain uncomfortable with the idea of involving parents in the school's activities beyond those that have been traditionally acceptable.

- **Teachers may lack knowledge about strategies for involving parents and developing collaborative relationships**

  Many teachers are unprepared when it comes to developing collaborative partnerships with parents. They report having little training in communication skills, how to help parents cope with their children's learning difficulties and how to work with parents who may be reluctant or difficult.

- **Often, the time allotted for parent-teacher interviews or conferences is not conducive to building relationships or developing effective communication skills**

  It is difficult to develop a relationship based on trust and respect in a 15-minute parent-teacher conference, but this is often the only forum for parents and teachers to meet face-to-face.

## Facilitating Collaborative Relationships with Parents

Educators have a responsibility to ensure they are doing all they can to facilitate collaborative relationships between home and school. The strategies below may be helpful in engaging all parents, including parents who may appear reluctant to be involved.

- Understand and empower parents.
  - Try to view the situation from the parents' perspective. Do factors like culture or employment issues represent significant barriers to their involvement?
  - Recognize parents' strengths and commend them for ways they support their children's education and the school.
  - Refer parents to support groups or community resources.

- Use these active listening skills to encourage communication with parents.
  - Maintain eye contact, nod and say "I see."
  - Wait until they are finished speaking before you reply.
  - When you reply, begin by rephrasing the parents' concern in your own words. This allows for clarification if you have missed a point.
  - Pay attention to body language and the emotional content of parents' messages.

- Use effective verbal communication techniques.
  - Monitor the balance between positive comments and comments about challenges.
  - Describe children's behaviours rather than making judgements.
  - Use "I" messages so parents don't feel blamed.
  - Explain jargon or concepts that may be unfamiliar. Describe tests and explain the results. Provide material on children's difficulties or diagnoses.

- Use strategies to deal effectively with situations in which parents are angry.
  - As parents speak more loudly, speak more softly.
  - Avoid arguing, becoming defensive or minimizing parents' concerns.
  - Try the following steps.
    1. Write down what the parent says.
    2. When the parent slows down, ask what else is bothering him or her and add to the list. Exhaust his or her list of complaints.
    3. Ask for clarification of complaints that are too general.
    4. Share the list and ask if it is complete.
    5. Write down suggestions for solutions.

- Maximize parents' involvement by frequently seeking their input.
  - Maintain regular, ongoing communication with parents through a communication book or telephone calls.
  - Invite parents to participate in the development of their children's individualized program plans and other key decision-making processes.
  - Arrange conferences and meetings at times that are convenient for parents. State the purpose of the meeting and the time allotted. Make sure there is enough time to facilitate problem solving.
  - Prepare for parent-teacher interviews by thinking about questions parents may have. (For Questions Frequently Asked by Parents of Children with Learning Disabilities, see Appendix 2, page 76.)
  - Share strategies for discussing with their child what a learning disability is. (For Tips for Parents on Explaining a Learning Disability to a Child, see Appendix 3, page 77.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Parents have access to the information needed to understand, make decisions and find resources.
- Parents are active participants in their children's education.
- Parents make meaningful contributions to decisions regarding their children's education.
- Children receive consistent messages from home and school regarding expectations for their academic performance and behaviour.
- There is ongoing communication between home and school.

## Connections to Other Alberta Learning Resources

- See School Strategies, Parents, pages 139–141 in *Teaching Students with Emotional Disorders and/or Mental Illnesses* (Alberta Learning, 2000), Book 8 of the *Programming for Students with Special Needs* series.
- See the following pages in *Teaching Students who are Gifted and Talented* (Alberta Learning, 2000), Book 7 of the *Programming for Students with Special Needs* series:
  - Parent Involvement in the IPP Process, page GT.76
  - Tips for a Better Meet-the-Teacher Conference, page GT.77
  - Questions to Help Parents Communicate Effectively with the School, page GT.78
  - Involving Parents as Volunteers, page GT.79
  - Appendix 20: Tips for Parents, page GT.246.

- See the following pages in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 in the *Programming for Students with Special Needs* series:
  - Parents as Team Members, pages LD.51–LD.52
  - Communication in Home-School Team Building, pages LD.53–LD.54
  - Individualized Program Plan, pages LD.70–LD.71.

# Identification and Assessment

It is important to have systems in place from kindergarten through senior high school to ensure students with learning disabilities are identified and appropriate educational supports are put in place. The optimal approach is to provide assistance as early as possible. Early identification and intervention for young children with learning disabilities leads to better school adjustment and performance. However, learning disabilities are lifelong and their negative impact may increase and become more evident as the demands of the school environment change. In addition, students may be able to mask their difficulties by using their strengths or by misbehaving to avoid learning challenges. Systems for identification and assessment are needed throughout the school years.

A collaborative team, such as a Student Support Team Model described on page 6 and a problem-solving approach to program planning, provide opportunities for the early and ongoing detection of learning problems and the identification of learning disabilities. Parents and/or classroom teachers need to be aware of signs that a child is encountering difficulties. (For early indicators of learning difficulties, see Appendix 4, pages 78–79.)

There are many reasons for student difficulties, one of which may be learning disabilities. A team approach maximizes the understanding of a student's difficulties. Specialized assessment is required for formal diagnosis of a learning disability.

## Barriers to Identification

Parents and school personnel often express frustration about the barriers that interfere with the identification of learning disabilities. Some of these barriers are listed below.

▶ **The complex nature of learning disabilities**

- Learning disabilities are an invisible handicap and are often misunderstood.
- Students with learning disabilities encounter unexpected difficulties. They do many things well and may be labelled lazy or unmotivated when they encounter difficulties.
- Learning disabilities are a heterogeneous group of disorders; i.e., there are many patterns of difficulties and strengths, and a range of severity of difficulties.
- Teachers may not have a systematic way to identify students who are not progressing well or to initiate steps to determine a student's needs.

▶ **Issues in identification**

- There is no single test to identify or diagnose a learning disability and the definition of a learning disability may be operationalized in different ways. Different school jurisdictions and different professionals may use differing criteria for diagnosing a learning disability.
- Identification procedures for significant underachievement; e.g., two years below grade level, are not sensitive to the detection of learning problems in young children.
- Readiness screening of young children for future learning problems is expensive, time-consuming and frequently inaccurate.

- **Narrow view of assessment**
  - Assessment is often mistakenly equated with testing to label students rather than being viewed as a team process that contributes to program planning.
  - Students may be put on a wait list for formal diagnostic assessment before programming or interventions are initiated.

- **Philosophical differences**
  - There may be a reluctance to label children, particularly young children.
  - Teachers differ in their practice with regard to when and why they refer students for further assessment.

## Facilitating Detection and Identification

The following suggestions will contribute to effective processes for detecting and identifying learning disabilities.

- **Set up a Student Support Team to respond to teachers' concerns about students.**
  - The team could promote professional development to increase teachers' awareness of indicators across the school years. (For more on indicators of trouble, see Appendix 4, pages 78–79.) Remember, there may be many reasons for student difficulties and they need to be explored carefully.
  - The team could develop classroom assessment practices to identify when students are not making progress toward curriculum expectations.
  - The team could develop efficient pre-referral steps that draw on expertise at the school level to assist with problem solving, and provide suggestions for understanding and addressing the needs of students.
  - The team could encourage the involvement of parents early in the planning process. If parents have meaningful involvement, they will know action is being taken.

- The team could promote collaboration to maximize flexibility in organizing for instruction so that additional assistance is provided to students encountering difficulties.
- The team could implement preliminary interventions, monitor their success and hold follow-up meetings to review students' progress.
- The team could arrange for the involvement of professionals with expertise in the problem-solving process before obtaining referrals for specialized assessment. For example, a psychologist or speech-language pathologist could participate in brainstorming preliminary intervention strategies. Access to such professionals varies and Student Support Teams are organized flexibly.
- The team could arrange for appropriate referrals to other professionals for further specialized assessment and possible diagnosis of a learning disability.

▶ **Organize an assessment process that encompasses multiple sources of information and a team approach.**

- No single method of assessment will provide educators with "the answer." However, strong support exists for an assessment approach that encompasses multiple sources of formal and informal assessment information.
- A team approach is most effective. The diagnosis of a learning disability is made by a qualified professional on the basis of multiple sources of information. The information from the classroom (particularly with regard to the student's response to various interventions), the parents' input, the student's input, and data from various methods of informal, formal and specialized assessment contribute to the identification of a learning disability. These multiple sources of assessment information guide program planning for the student.

▶ **Organize a team approach to the development, implementation and monitoring of individualized program plans (IPPs).**
(See Section on IPPs, pages 29–33.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Students with learning disabilities receive the services and supports they need when they encounter difficulties.
- Teachers are aware of the characteristics of students with learning disabilities.
- Students are referred, when appropriate, for further specialized assessment.
- Parents have input into the identification and assessment of their children's needs.
- Procedures are in place for the early, ongoing identification of learning disabilities.
- Multiple sources of assessment information are used in the identification and diagnosis of learning disabilities.
- A team approach is used in the identification and diagnosis of learning disabilities.

## Connections to Other Alberta Learning Resources

See Identification and Program Planning, pages LD.47–LD.72 in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series.

# Ongoing Assessment

Assessment is the process of gathering information to make decisions. Assessment serves a variety of purposes, including the detection, identification and diagnosis of learning disabilities as described in the previous section. Assessment is also important for ongoing program planning and monitoring. Individualized program plans are based on assessment information regarding strengths and needs. Ongoing monitoring of student progress is essential to success. Teachers have an important role in assessment, particularly for program planning and monitoring. These aspects of assessment are emphasized in this section.

Teachers are continuously gathering information to make decisions about the education programs of their students. Key aspects of the teaching-learning process include:

- assessment—gathering information
- evaluation—interpreting assessment information and making judgements about the process, product or performance
- communication of student achievement and growth.

## Facilitating Effective Assessment

There are many possibilities in planning assessment strategies. Diagnostic assessment provides information about what students know and can do, and about their strengths and difficulties to inform decisions and instructional plans. Formative assessment provides ongoing feedback about student progress and the effectiveness of instruction. Summative assessment provides information about student progress and achievement at the end of a unit or term, and provides information to assist in setting the next goals. All of this information contributes to programming decisions. The following suggestions will facilitate the effectiveness of the assessment process.

▶ **Use a variety of techniques and instruments to assess the full range of student knowledge, skills and attitudes, and gather information about student learning. Plan and revise instruction based on this information.**

- Provide students with assignment options. Meeting diversity in today's classrooms requires differentiated instruction, which includes choices for students to express their knowledge. For example, options for writing a report might include creating radio broadcasts, writing letters to authors, making displays or models, performing dramatic presentations or creating multimedia products.
- Be aware of the wide range of assessment approaches.
  - Contextualized or curriculum-based assessment is related to the curriculum. Informal approaches involve observation of process and product of students, such as informal reading inventories, observation checklists, rating scales, anecdotal records, dynamic assessment (test-teach-test) and performance-based assessment. Formal approaches include teacher-prepared tests, unit tests, cloze tests, assignments, checklists, publisher prepared unit tests and provincial achievement tests.
  - Decontextualized assessment is unrelated to the prescribed curriculum. Student performance may be compared to norms or to criteria in formal tests, many of which require specialized training to administer and interpret. The information is helpful in identifying strengths and needs to assist in program planning.

▶ **Modify test formats and procedures.**

Consider modifications and accommodations to allow students with learning disabilities to show their knowledge and minimize the negative impact of their disabilities. Consider the following options:

- adjust test appearance; e.g., margins, spacing, amount of print on page, type size, colour coding, highlighted instructions
- adjust test design; e.g., T/F, multiple choice, matching, oral
- allow extra time for completing tests and assignments
- shorten the tests or assignments
- break tests into chunks
- provide appropriate accommodations; e.g., reader, scribe, computer, tape recorder, calculator, grid of math facts, manipulatives or use of a paper strip for tracking.

▶ **Involve students in the assessment process.**

- Engage students in conversations about their learning, their understanding of tasks, the strategies they know and use, and what works best for them.
- Help students evaluate progress toward their own learning goals.
- Provide ongoing frequent assessment and feedback to students about their progress.
- Involve students in developing assessment rubrics.
- Involve students in goal setting, reflection and self-assessment through learning logs, goal sheets, self-reflection captions on portfolio selections and self-assessment rubrics. (For a sample writing self-assessment tool, see Appendix 5, pages 80–82.)
- Provide students with opportunities to suggest alternative assignments to demonstrate their learning.
- Be explicit about expectations. Clearly establish and communicate the criteria for assignments. Explain the scoring criteria and provide exemplars and rubrics.

► **Monitor progress frequently.**

- Gather baseline data as a benchmark for comparison to demonstrate growth.
- Organize ongoing frequent monitoring of student progress in reading and writing; e.g., systematic weekly checks, timed readings, observations during oral reading, daily journal writing and response, spelling tests.
- Gather information about the effectiveness of accommodations. Does the student benefit from extra time on exams? Does the quality of the student's written work improve when produced on a computer?
- Make decisions about the need for instructional modifications if the student is not progressing.

► **Consider the following assessment approaches.**

- Student portfolios provide a chronological record of student growth and achievement. It is important to involve students in the process of selection and self-reflection, include a variety of products (written, audiotapes of oral reading, videos), and organize the information to demonstrate progress over time. Portfolios can be useful for transitions from one setting or year to another. A mini-selection portfolio containing samples that illustrate progress (an early sample and a recent sample of best work) provides a baseline for the receiving teacher.
- Rubrics are helpful for communicating performance expectations to students and for student self-assessment. They provide a measurement scale with a set of criteria that describes the characteristics of products or performance along the scale. Avoid negative descriptors. Use levels or descriptors of growth.
- Error and miscue analysis of classroom assignments or tests can provide information about student difficulties. For example, are errors on a test related to misreading directions, carelessness, lack of understanding of concepts, application of concepts, test taking or studying? Are errors in reading a passage meaningful substitutions? Are errors in math related to poor recall of math facts or misunderstanding of computational procedures?

- Informal reading inventories can provide baseline information and measure growth in oral and silent reading. Miscue analysis of oral reading errors provides information about strengths and areas of need to guide instruction.
- Performance assessment involves judging a response, product or performance designed to demonstrate learning. Share the criteria that will be used to judge students' products or performances.
- Monitor students' strategy use through observations and interviews. (For more information about observing student reading, see Appendix 6, page 83.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Student progress toward IPP goals and objectives is actively monitored.
- Assessment results are used to adjust student IPPs.
- Student progress is clearly demonstrated through a variety of assessment techniques.
- Student progress is clearly communicated to students and parents.
- Students are involved in assessing their progress.

## Connections to Other Alberta Learning Resources

- See the following sections in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series:
  - Assessment for Program Planning, pages LD.58–LD.69
  - Individualized Program Plan, pages LD.70–LD.72
  - Annotated Test Inventory, pages LD.305–LD.320.
- See Varying Resources, Materials, Presentation, Assignments and Assessment, pages TSD.14–TSD.15 in *Teaching for Student Differences* (Alberta Education, 1995), Book 1 of the *Programming for Students with Special Needs* series.
- See Evaluating student progress, pages 15–16 in *Quality Teaching: Quality Education for Alberta Students* (Alberta Education, 1995).

# Individualized Program Plans (IPPs)

Individualized program plans (IPPs) are written commitments of intent by education teams to ensure appropriate planning for exceptional students. They are working documents and records of student progress.

IPPs are:

- collaborative team efforts involving students, parents, regular education teachers and resource personnel
- based on a belief in individualized programming and developed to address the specific needs of individual learners
- instructional guides for teachers
- administrative documents which help monitor and evaluate students' educational progress and programs
- guides for transition planning.

## Strategies to Facilitate Effective IPPs

IPPs are most effective when they are used actively and on an ongoing basis. Strategies to facilitate the IPP process are outlined below.

### ▶ Enhancing the collaborative team

- Actively involve parents in the IPP process.
  - Seek parental input prior to IPP conferences; e.g., send home a form seeking information about parent goals, children's preferences, etc. (See Appendix 7, pages 84–85, for a sample form.)
  - Discuss how and when parents want to be involved in their children's education programs, and how they want to be kept informed.
  - Assist parents in preparing for IPP meetings.
  - Create a draft IPP and invite meaningful input from parents. Make changes and additions with their input. (Putting a signature on a finalized IPP with no opportunity for input may be discouraging to some parents.)
  - Provide parents with a copy of the IPP to facilitate their support at home and as a working copy for their observations.

- Actively involve students in the IPP process with increasing participation as students mature.
  - Involve students in setting goals and evaluating progress to increase ownership and motivation.
  - Involve students in IPP conferences, as appropriate.
  - Support students in taking responsibility for describing their needs and seeking appropriate support. (For more information about helping students communicate in the IPP process, see Appendix 8, page 86.)

- Involve appropriate school personnel in developing IPPs.
  - All school personnel involved in providing instruction for students with learning disabilities should be involved in

developing IPPs. There is growing recognition that regular classroom teachers are better able to use IPPs as instructional guides when they are involved in developing them.

- IPPs are most effective when viewed in the context of an active problem-solving process, which can be facilitated by an organizational structure; e.g., Student Support Team Model, that provides a forum for ongoing team planning.
- Provide professional development and guidance for teachers to increase understanding of the purpose and structure of IPPs.
- Encourage support for the IPP process; e.g., time for involvement, communication, access to additional expertise.

### ▶ Individualizing IPPs

- Focus on the individual needs of students, not on the categorical label. Avoid a generic list of accommodations because individuals with learning disabilities vary widely in their strengths and needs.
- Consider students' academic, cognitive and processing strengths. How can instruction build on strengths?
- Consider the appropriate balance for individual students. Each student should participate in the regular curriculum as much as possible with accommodations to support success. Students may also need additional instruction to develop skills and strategies.
- Use multiple sources of assessment data to determine strengths and needs.
- Consider students' needs beyond academics, such as social and behaviour needs.
- Focus on key goals for the individual student.
- Make collaborative, comprehensive transition plans well in advance of anticipated transitions.

### ▶ Using IPPs

- IPPs need to be accessible working documents to be useful for ongoing instruction and monitoring. Some teachers keep them in binders in their desks for planning lessons and noting observations.

- If there are several teachers responsible for a student's education program, it is important to develop procedures for all teachers to have access to the IPP so they can use it to plan instruction, monitor progress, and contribute to evaluating and changing goals and objectives.

▶ **Monitoring student progress**

- Use diverse assessment and evaluation strategies to demonstrate and communicate student progress.
- Monitor progress frequently. If objectives are met, set new ones. If the student is not demonstrating progress, review the program and make changes.
- Use IPPs as working documents. Record, note or attach assessment information.
- Make changes and additions as required.

▶ **Guiding transition planning**

- Collaborative, comprehensive transition plans should be included in IPPs. (See section on Transition Planning, pages 35–40.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Parents, school staff and students fully understand the goals and specific objectives in IPPs.
- IPPs are developed by people who have knowledge of individual students and who will be providing services to those students.
- Teachers demonstrate and communicate student growth in learning.

- IPPs are revised to reflect the changing needs of students.
- Instruction is guided by student needs as identified in IPPs.
- Strategies for transitions identified in IPPs are implemented.

## Connections to Other Alberta Learning Resources

- See the following sections in *Individualized Program Plans* (Alberta Education, 1995), Book 3 of the *Programming for Students with Special Needs* series:
  - Section II: Essential Information, page IPP.3
  - Section III: The IPP Process, pages IPP.4–IPP.49.
- See Parent Involvement in the IPP Process, page GT.76 in *Teaching Students who are Gifted and Talented* (Alberta Learning, 2000), Book 7 of the *Programming for Students with Special Needs* series.

# Transition Planning

A transition is any event that results in changes to relationships, routines, assumptions or roles. Transitions are a normal part of life and occur throughout the life cycle. For students, transitions occur at various times during their education programs. Starting school, changing grades and moving from school to post-school settings are common transitions for students. While any student can have difficulty with transitions, students with learning disabilities often have difficulty managing transitions in their lives.

## Key Principles of Effective Transitions

Transition planning is most effective if guided by the following key principles.

- **Effective transitions are *planned*.**

  In order for transitions to be successful, they must be carefully planned. First, planning for transitions should start well in advance of the actual transition. Second, regardless of whether students are moving from special settings or graduating from senior high school, programming decisions need to be based on an understanding of individual students. This means understanding the individual student's strengths, needs and goals, as well as those of the student's family. Third, similar to developing individualized program plans (IPPs), transition planning should be dynamic and ongoing since transition objectives may change. Finally, a written record of transition planning, including transition goals and strategies, should be included in students' IPPs.

- **Effective transitions are the result of a *collaborative* effort.**

  Successful transitions involve input from a variety of people, including parents, students, special and regular education teachers, and community based personnel, such as career counsellors or post-secondary school admissions officers. Collaboration among the various stakeholders should strive to create a supportive relationship and take a problem-solving approach to transition planning. As students move through the education system, they need to become more involved in planning their own transitions. Research has consistently shown that student involvement in the planning process helps students develop understanding of their learning disabilities, and provides opportunities for them to develop much needed self-advocacy and problem-solving skills. (For more on involving students in planning for transitions, see Appendix 9, page 87.)

▶ **Effective transition planning is *comprehensive* in scope.**

Students with learning disabilities face a variety of challenges, including academic, social, vocational and interpersonal difficulties. As a result, transition planning should focus not only on the academic skills needed for success, but also on helping students develop the ability to problem solve in new situations, monitor and regulate their own performance, and interact appropriately with peers and authority figures. Comprehensive transition planning also involves helping students become aware of their learning strengths, and the type of supports and accommodations available to them in dealing with their learning difficulties.

## Facilitating Effective Transitions

Transition planning is an ongoing process. There are a variety of strategies that are appropriate across the school years, including the following.

▶ **The Elementary School Years**

- Help students become comfortable with new surroundings and people by arranging for students to visit new classrooms and meet new teachers.
- Identify the skills students will need in the next environment and provide opportunities for them to learn these skills.
- Involve parents by helping them become advocates for their children.
- Listen to students' concerns about transitions. Engage in frequent discussion with them about the transition and highlight the positive aspects of a new environment.
- Help students take responsibility for their learning by establishing consistent homework and study routines. Encourage students to be independent learners and praise their efforts to take responsibility for their learning.
- Teach students organization and study strategies, such as time management, note taking, test preparation and test-taking strategies.

### ▶ The Junior High School Years

- Begin exploring career interests.
- Encourage students to discover their learning strengths.
- Involve students in transition planning by actively participating in goal setting.
- Help students learn how to monitor their progress and assist them in sharing their perceptions with the transition planning team.
- Teach students how to explain their learning needs to others and become self-advocates.
- Teach students effective study strategies, such as time management, note taking, test preparation and test-taking strategies.
- Explore appropriate assistive technologies and encourage keyboarding skills.

### ▶ The Senior High School Years

- Explore career options.
- Help students and parents understand the differences between senior high school and post-secondary settings.
- Encourage students to take academically challenging programs in the most integrated settings possible.
- Continue to emphasize the teaching of learning and study strategies.
- Help students and parents learn about appropriate accommodations and assistive technologies.
- Ensure students have all the necessary documentation to receive appropriate support in post-secondary settings.
- Explore post-secondary institutions and other community-based services; e.g., Alberta Human Resources and Employment. (For more on transition planning during high school, see Appendix 10, page 88.)

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- There is collaboration in the planning and implementation of comprehensive transition plans.
- Continuity of programming is maintained across settings and across grades.
- Parents are actively involved in planning for transitions.
- Students are aware of, understand and are better prepared for the expectations of new environments.
- School personnel are knowledgeable about the needs of students making the transition to their programs.

## Connections to Other Alberta Learning Resources

- See Long Range Planning/Transition Planning, pages LD.80–LD.85 in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series.
- See Transition Planning, pages IPP.41–IPP.49 in *Individualized Program Plans* (Alberta Education, 1995), Book 3 of the *Programming for Students with Special Needs* series.
- See *Transition Planning for Young Adults with Intellectual Disabilities: A Resource Guide for Families, Teachers and Counsellors* (Alberta Education, 1992).

# Self-advocacy

Self-advocacy refers to taking action on one's own behalf. Studies of highly successful adults with learning disabilities have identified the ability to self-advocate as an important factor contributing to success. Acts of self-advocacy can lead to self-determination, which contributes to positive outcomes for adults with learning disabilities. Self-determination can be defined as the ability to consider options and make choices that affect one's future.

Students with learning disabilities need to advocate effectively for themselves. They need to learn strategies for problem solving and setting goals. They need to recognize, accept and understand their learning disabilities, and take responsibility for themselves. The process needs to begin early in students' school careers and be practised actively in the adolescent years.

## Barriers to Self-advocacy

Students with learning disabilities may not self-advocate effectively for many reasons, including the following.

- They may lack knowledge of themselves as learners, and be unable to clearly describe their abilities, needs and the conditions that best promote their learning.
- They may not know who to contact to obtain the necessary assistance or accommodations, what to ask for or how to best utilize supports.
- They may lack the ability to articulate personal strengths and needs clearly and appropriately. This may be a result of expressive language difficulties, weak social skills or lack of practice in describing their needs.
- They may not have been directly taught appropriate self-advocacy skills and/or do not have someone to coach them through situations where they might need to self-advocate.
- They may have limited confidence in their abilities and low self-esteem. As a result, they may be reluctant to ask questions in class or request extra assistance.
- They are often passive in their approach to their education, feeling that their educational future is beyond their control. This includes relying on their parents and teachers to advocate for them.
- They often encounter people who do not understand learning disabilities and why accommodations or assistance may be appropriate.

## Facilitating Self-advocacy

Given the many barriers to self-advocacy, students with learning disabilities need support to learn and practise self-advocacy. The following strategies contribute to the development of self-advocacy.

▶ **Involve students in making decisions about their education.**

- Involve students in planning and implementing their IPPs. Student input and involvement should increase as they proceed through school.
- Provide opportunities for making plans and choices.
- Involve students in evaluating their performance, and increase self-monitoring and personal responsibility for learning.

▶ **Help students understand their learning strengths and needs.**

- Talk with students about the concept of learning disabilities, and their particular strengths and needs. (See Appendix 3, page 77.)
- Provide specific feedback that helps students understand how they learn best; e.g., "You seem to remember better when you get a chance to see the information."
- Assist students in learning to describe their thinking. Describe your own thinking and encourage students to talk about their thinking. Rephrase their ideas to highlight their learning strengths and needs.
- Explain assessment results so students understand their abilities and needs, and the implications for their schooling and lives.

▶ **Model and teach appropriate self-advocacy skills.**

- Younger students first learn self-advocacy skills by observing how parents, teachers and others advocate on their behalf. Begin early by discussing learning strengths and needs with students, as well as observations on how they learn best. Involve them in conversations about program planning. Even if they just listen, they are learning about collaboration and problem solving.
- Steps for self-advocacy for teens can be found in several resources. (See Bibliography, pages 107–117.) These skills need to be demonstrated, role-played, practised and evaluated. Provide extensive guidance in the middle school/junior high years with greater expectations for independence in the high school years.

- Help students prepare for meetings, conversations with instructors or other situations in which they may be involved in planning their educational futures. Model and role-play appropriate interactions.
- Self-advocates need to be informed and organized in order to be effective. Help students prepare and organize themselves. (For more on putting self-advocacy into action, see Appendices 11 and 12, pages 89–92.)
- Students can also learn a great deal from others who have gone through similar experiences. Provide students with opportunities to meet others with learning disabilities so they can learn from the experiences of these individuals. Videotapes of successful individuals are also available for this purpose.

► **Help students set appropriate and realistic goals for their learning.**

- An important part of educational decision making for students with learning disabilities is setting appropriate goals. Students should be actively involved in this process and taught ways to make goals tangible and realistic. One strategy is to make goals SMART: Specific, Measurable, Achievable, Realistic and Timely.
- Follow up with students to review their success in achieving their goals. Self-monitoring and evaluation are important for developing realistic goals.

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Students are able to appropriately describe their abilities and needs, and the accommodations and assistance that support their learning.
- Students are actively involved in setting realistic goals for their learning.
- Students stay in school longer.

- More students go on to post-secondary education.

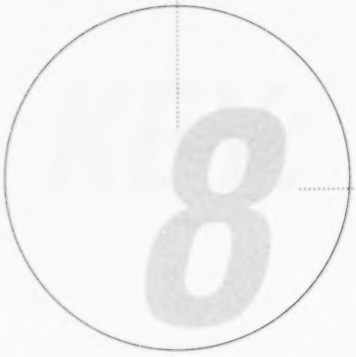
- Students are successful in the workplace.

## Connections to other Alberta Learning Resources

- See the following pages in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series:
  - Goal Setting, pages LD.109–LD.110
  - Enhance Personal Responsibility, page LD.204
  - Help Students Set Reasonable Goals, page LD.205.

- See the following chapters in *Make School Work for You: A Resource for Junior and Senior High Students who Want to be More Successful Learners* (Alberta Learning, 2001):
  - Chapter 1: Know Yourself, pages 1–11
  - Chapter 7: Get People on Your Side, pages 69–74.

- See the following pages in *The Parent Advantage: Helping Children Become More Successful Learners at Home and School, Grades 1–9* (Alberta Education, 1998):
  - Set Goals for School Success, page 5
  - Appendix 2: Homework Contract, page 53.



# Accommodations

Students with learning disabilities face many challenges in school, however many of these difficulties can be addressed by providing accommodations. An accommodation is a change or alteration to the regular way a student is expected to learn, complete assignments or participate in the classroom. There are three types of accommodations:

- classroom/physical accommodations; e.g., alternative seating, adaptive devices
- instructional accommodations; e.g., providing copies of notes, alternative reading materials
- evaluation/testing accommodations; e.g., extra time, oral tests.

(For a list of possible accommodations, see Appendix 13, pages 93–95.)

There is growing interest in assistive technology for students with learning disabilities. The term assistive technology refers to any item, piece of equipment or product that is used to help individuals improve their ability to perform specific tasks. Assistive technology provides tools that allow individuals with learning disabilities to work more

effectively within academic and vocational settings. Computers are the most well-known form of assistive technology but there are a variety of products available to help students with learning disabilities. Students who are experiencing significant academic difficulties should consider using assistive technology, however not every student with a learning disability needs assistive technology. The decision to try assistive technology should be made on an individual basis, after considering the student's strengths, needs and motivation. (For more information about accommodations involving assistive technology, see Appendix 14, pages 96–97.)

## Barriers to Effective Use of Accommodations

Teachers play a key role in helping students identify and use accommodations appropriately. Similarly, parents, students and other school personnel have important roles in selecting, monitoring and evaluating the use of accommodations. Understanding some of the common barriers to the effective use of accommodations is an important starting point. Common barriers include the following.

- **Misunderstanding the purpose**
  - Parents, students and teachers sometimes perceive that accommodations give students with learning disabilities an unfair advantage over other students. In other words, by changing the way a student can take a test or submit an assignment, students with learning disabilities may be perceived as having opportunities that other students do not have. In reality, accommodations remove, or at least lessen, the impact of a student's learning disability and therefore give the student the **same** opportunity to succeed as other students.
  - A second misunderstanding is the perception that accommodations replace the need to acquire or develop basic skills. Accommodations are necessary for many students with learning disabilities to reduce the impact of their learning disabilities, and make it easier for them to acquire and produce information. However, it is important to balance the use of accommodations with the teaching and practice of basic literacy, numeracy and study skills so that students with learning disabilities can develop their skills to their fullest potential.

- **Accommodations are often not appropriate**
  - Deciding on appropriate accommodations is not an easy task. Many teachers, psychologists and other professionals working in schools report having difficulty translating assessment information into appropriate accommodations. As a result, there is a tendency to rely on the same basic accommodations for all students with learning disabilities rather than individualizing the accommodations to match the needs and strengths of the student.

- **Accommodations are not used consistently**
  - An accommodation is essentially a change in the way something is normally done and students need time to learn how to use accommodations effectively. Accommodations must be used regularly in order for teachers to determine if they are helping. Some students report that they did not have opportunities to try accommodations before they used them on major assignments, such as tests or exams.

- **Lack of student involvement in the process**
  - Teachers and other school-based personnel often report that it is difficult to involve students in the decision-making process. Research, however, indicates that students who benefit most from accommodations are those who were involved in the process of selecting accommodations. All too often a student who benefits from an accommodation does not make full use of it because he or she is self-conscious about doing things differently than peers. Involving students in selecting accommodations provides opportunities for students to learn about accommodations and become comfortable using them.

## Facilitating the Use of Accommodations

There are several important considerations that will help overcome the above barriers and facilitate the effective use of accommodations.

- **Obtain information about school, school board and provincial policies.**
  - Be sure to include accommodations on students' IPPs. Use of accommodations for diploma exams will only be permitted if they are specified on IPPs.
  - Students must have used an accommodation during the course of their regular studies in order to be permitted similar accommodations on diploma exams.

- **Use a collaborative process.**
  - Educate parents and students about the benefits of using accommodations. Be honest about the problems or difficulties students may encounter.
  - Involve relevant professionals in selecting appropriate accommodations based on their knowledge of students' strengths and needs, and the demands of the setting.
  - Ask parents and students about their preferences regarding accommodations. Respect parents' and students' opinions and attitudes toward accommodations. Do not insist on accommodations for individuals who are resistant.

- **Base decisions on a thorough understanding of student strengths and needs.**
  - Use information from both formal and informal sources when selecting accommodations.
  - Identify student strengths and try to use them to determine appropriate accommodations.
  - Try to select accommodations that are the least intrusive for students. If possible, avoid implementing accommodations that isolate students from peers or draw unnecessary attention.
  - Do not rule out accommodations that are usually associated with students with visual, hearing or mobility challenges. For instance, students with learning disabilities may benefit from large print materials or the use of a FM-system to amplify sound.

▶ **Use accommodations consistently and monitor student performance.**

- Prioritize the introduction of accommodations if more than one accommodation is used. Let students become familiar with one accommodation before introducing another.
- Consult with students about the use of accommodations after they try them. Compare the student's performance before and after.
- Set a time to formally review the student's performance using accommodations.
- Teach students how to use accommodations, especially if they involve assistive technology and assistance from personnel; e.g., scribes or readers.

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Parents and students work with school personnel in selecting accommodations.
- Accommodations agreed upon and included in students' IPPs are consistently implemented and monitored.
- Students are involved in deciding on and evaluating accommodations.
- Students develop an understanding of accommodations that help compensate for their learning difficulties.

## Connections to Other Alberta Learning Resources

- See the following sections in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series:
  - Instructional and Accommodations Checklist, pages LD.73–LD.75
  - Use of Technology for Accommodation, pages LD.76–LD.79
  - Alberta Education Provincial Achievement Tests and Diploma Examinations, page LD.199.

- See the following sections in *Teaching Students with Visual Impairments* (Alberta Education, 1996), Book 5 of the *Programming for Students with Special Needs* series:
  - Section III: Strategies, pages VI.10–VI.17
  - Section IV: Specialized Materials and Equipment, pages VI.18–VI.23.

- See *Individualized Program Plans* (Alberta Education, 1995), Book 3 of the *Programming for Students with Special Needs* series.

- See Classroom Accommodation, pages DHH.25–DHH.26 of *Teaching Students who are Deaf or Hard of Hearing* (Alberta Education, 1995), Book 4 of the *Programming for Students with Special Needs* series.

# Instruction

Students with learning disabilities vary in the severity and nature of their difficulties, and in the range and types of supports they need. Each student with a learning disability has a different pattern of strengths and needs which influences learning. Some may have weak language skills and experience their greatest difficulties in reading and written language. Some may have strong oral language skills and experience their greatest difficulties in written expression, including the physical act of handwriting, the organization of ideas and mechanics. Others may be successful in the acquisition of literacy skills but experience difficulties with nonverbal problem solving, arithmetic and social interactions.

Instruction is most effective when it is guided by an understanding of the pattern of difficulties experienced by individual students with learning disabilities. One approach to understanding students' strengths and needs is to organize information about students' characteristics into interacting domains.

These domains include:

- the metacognitive domain—knowledge and control of thinking and problem solving
- the information processing domain—attention, memory, speech and motor output
- the communication domain—auditory and language skills
- the academic domain—reading, written expression, mathematics
- the social domain.

Students' characteristics must be considered in context because they interact with the demands of the task and setting. Students may show strengths in a social studies class when the task requires an oral presentation of knowledge but experience great difficulty when required to express the same knowledge in a written essay. As students progress through school, there are changes in curriculum demands, expectations, workloads and settings.

In this section, instructional strategies for students with learning disabilities are described, followed by instructional emphases important during the early school years, elementary years and junior high/senior high school years.

## Instructional Strategies to Facilitate Learning

The following instructional strategies are applicable for students with learning disabilities across all grade levels.

- Combine direct instruction and strategy instruction. Direct instruction is teacher-directed explicit instruction with clearly specified objectives taught in specific small steps providing feedback, guided and independent practice, and transfer practice. Strategy instruction involves teaching students how to approach tasks and use knowledge to solve problems, including planning, performing and evaluating performance. Research supports a combined direct instruction and strategy instruction model with the following elements:*

* Adapted with permission from H. Lee Swanson with Maureen Hoskyn and Carole Lee. *Interventions for Students with Learning Disabilities: A Meta-Analysis of Treatment Outcomes* (New York, NY: The Guilford Press, 1999), pp. 218–219.

- sequencing; e.g., breaking down the task, fading of prompts or cues, sequencing short activities, giving step-by-step prompts
- drill-repetition and practice-review; e.g., daily testing of skills, frequent short opportunities for review and practice distributed over time, repeated practice, sequenced review, daily feedback and/or weekly review
- segmentation—breaking down a targeted skill into smaller units and then synthesizing the parts into a whole
- directed questioning and responses; e.g., the teacher asks process-related and/or content-related questions; students are directed to ask questions; teacher and students engage in dialogue
- controlling the difficulty or processing demands of a task; that is, tasks are sequenced from easy to difficult, and only necessary hints and probes are provided
- technology; e.g., use of computers, structured text or flow charts to facilitate presentation, emphasis on pictorial representations, use of specific or structured material, use of media to facilitate presentation and feedback
- modelling of problem-solving steps by teacher
- instruction in small groups
- strategy cues, reminders to use strategies; e.g., teacher verbalizes problem-solving steps, think-aloud models are used, teacher presents benefits of strategy use or procedures.

• Use flexible groupings to organize instruction to maximize active student involvement; e.g., large group, small group, pairs, individual, cooperative learning, peer tutoring.

• Differentiate instruction. Where possible, offer students multiple options with regard to the degree of structure or open-endedness of the task, the pace of learning, the degree of independence, the abstractness and reading level of materials, and the products and assignments to demonstrate learning.

• Maximize students' access to the curriculum by providing accommodations, and varying the instructional time, environment, resources, materials, presentation formats, assignments and assessment techniques. (See Accommodations and Ongoing Assessment sections, pages 47–52 and 23–28.)

- Implement effective strategies for IPP development and implementation, transition planning, and the development of self-advocacy. (See IPPs, Transition Planning and Self-advocacy sections, pages 29–33, 35–40 and 41–45.)
- Consider three key characteristics of effective instruction for students with learning disabilities when planning instruction.
  - Explicit instruction—Provide systematic, clear, overt, detailed explanations, and demonstrate steps, reasons and connections among concepts.
  - Intensive instruction—Provide opportunities for highly concentrated individualized learning experiences, such as individual and/or small group instruction with modelling, demonstration and feedback that is systematic and responsive to the specific needs of students. The more significant the learning needs of students, the greater the need for intensive instruction.
  - Extensive instruction—Provide increased instructional time with frequent opportunities for students to engage in learning experiences and to practise over time. Students with more severe needs may require more intensive instruction for a longer period of time.

## Tips for Teaching Strategies

Students with learning disabilities often lack strategies, fail to apply or generalize strategies, choose ineffective or inappropriate strategies and/or experience difficulty engaging in effective self-monitoring behaviour. Students' acquisition and use of strategies can be facilitated by the following tips.

- Involve students throughout the strategy teaching process.
- Actively involve students in setting personal and academic goals, and self-monitoring the use of strategies.
- Prepare students. Provide explicit instruction. Students are more likely to learn a strategy if they are well-informed about what is expected, what is being learned, why it is being learned and how it can be used.

- Model the steps of a strategy. Demonstrate both processes and procedures by thinking aloud as the strategy is applied.
- Plan for a gradual release of responsibility. Provide many opportunities for students to apply the strategy with guidance and specific feedback. Dialogue and interaction assist students in understanding tasks, and in knowing when and how to use strategies effectively. Provide cues, prompts and assistance responsive to a student's understanding, and gradually withdraw support as the student gains independence.
- Collaborate to teach for transfer. Provide modelling, prompts and cues to encourage strategy use in different classes with different content. If the student has several teachers, all teachers should be aware of the strategies and encourage students to use them. Teachers may need to demonstrate how to adapt a strategy to apply it successfully to their particular content area.
- Monitor strategy use. Strategies are only effective if students actually use them. Encourage students to use cue systems to remind them of strategies and their steps. Include demonstration of the use of a strategy as part of the requirement for a project. If this expectation is explicit from the beginning of an assignment, it encourages strategy use.

## Tips for Teaching Strategically

In addition to teaching students to use strategies, effective instruction for students with learning disabilities involves strategic teaching.

- When delivering information, strategic teachers use instructional strategies that address the information processing needs of students with learning disabilities. For example, graphic organizers may be used as an instructional strategy to activate and organize students' prior knowledge about a topic and pre-teach vocabulary.
- Strategic teachers model strategies and prompt students to think about strategies.
- Strategic teachers promote the use and adaptation of strategies by students.

# Early School Years

The early school years are vital for students with learning disabilities. The optimal approach to teaching students with learning disabilities is to provide effective assistance as early as possible. Early identification and intervention lead to better school adjustment and performance in the primary grades. To help young children with learning disabilities successfully participate in the classroom, it is important to use instructional strategies that address the common areas of difficulty. These strategies are applicable in all content areas. In addition, early literacy instruction should be emphasized. The majority of students with learning disabilities have disorders of language, and difficulty learning to read and write. Students who encounter serious reading difficulties often have problems at the phonological level which interferes with learning how to identify individual words accurately and fluently, recognizing words by sight, and applying phonetic cues to decipher unknown words.

## Metacognitive Domain

- Establish classroom routines. Provide structure and clear expectations.
- Think aloud. Model problem solving. Talk about thinking and remembering. Talk about how to approach tasks, and how and why things are organized in certain ways.
- Provide visual organizers and visual models; e.g., pictures of steps for problem solving, a planning board with the sequence of activities for the day.

## Information Processing and Communication Domains

- Model and demonstrate. Present information using a multisensory approach so students hear, see, feel and experience information.
- Explicitly teach attending, listening and memory strategies.

- Activate prior knowledge. Label and show connections between new and known information; e.g., graphic organizers, K-W-L: What I Know, What I Want to Know, What I Learned (Ogle, 1986).
- Explicitly teach new concepts and vocabulary, including math vocabulary.
- Use themes across curriculum areas. The exposure to similar vocabulary and concepts throughout the school day limits the vocabulary and language demands, provides repetition and many applications of new vocabulary and concepts, and facilitates the development of vocabulary and the transfer of skills across subject areas.
- Request paraphrasing to check for understanding. Rephrase and restate directions, and provide visual or hands-on prompts if needed.
- Identify and implement necessary accommodations, such as where the student sits, types of writing instruments, reduced demands for copying, fewer problems on a page, graph paper for writing and math.

## Social Domain

- Model and provide direct instruction in socially appropriate behaviour.
- Provide explicit and specific feedback when students demonstrate positive social skills. Follow the "I FEED" principle: Immediate, Frequent, Enthusiastic, Eye-contact, Describe.
- Demonstrate the application of problem-solving steps in social situations.

## Academic Domain

**Early Literacy Instruction**

- Provide balanced literacy instruction which includes a combination of "meaning" emphasis and "code" emphasis.
  - Provide frequent authentic opportunities for reading and writing.
  - Organize a literacy-rich environment.
  - Use themes to organize instruction.

  - Provide systematic explicit direct instruction in:
    - phonemic awareness—breaking apart and manipulating sounds in words
    - letter-sound associations and the alphabetic principle
    - word identification strategies
    - text elements
    - comprehension and monitoring strategies.
  - Provide systematic explicit modelling and instruction in:
    - the writing process
    - story structure
    - mechanics: letter formation, punctuation, spelling.

- Monitor student progress frequently to guide programming decisions.
  - Consider using observations during oral reading, timed readings, daily journal writing and responses, written work samples and checklists to test a learning objective.

- Consider the following for students who are making slow progress in the acquisition of literacy skills:
  - more explicit systematic direct instruction and strategy instruction
  - more intense instruction: individual and small group (the more severe the difficulties, the more individual instruction is needed)
  - extensive instruction: more time devoted to teaching and learning to read
  - practice; e.g., sight words, guided oral reading with guidance and feedback; apply skills to authentic materials
  - provide frequent modelling, guided practice and specific feedback
  - select and adjust instruction and materials based on the specific needs of students.

- Organize frequent communication with parents and opportunities for parent involvement.

# Upper Elementary School Years

As students progress through school, there are increasing demands to read to learn, demonstrate what has been learned through writing and learn more content. Students with learning disabilities continue to require opportunities to further develop and practise literacy skills. They need to develop strategies for approaching increasingly complex tasks, and accommodations to allow them to access information and express what they have learned. The strategies described below can be applied to all content areas.

## Metacognitive Domain

- Provide explicit instruction in systematic problem solving.
  - Model problem-solving steps by thinking aloud.
  - Provide students with a general framework to guide them through the problem-solving process. (What is my problem? How can I solve it?) (For a Student's Guide to Problem Solving, see Appendix 15, page 98.)
  - Paraphrase and label student behaviour to give students specific vocabulary and descriptions of the strategies they are using successfully. For example, "When you used your story map, I saw it helped you follow a plan."

- Provide explicit instruction in study and organizational skills.
  - Involve students in setting personal and academic goals, and evaluating their progress.
  - Model and teach strategies for time management.
  - Teach students how to organize their notebooks.
  - Teach strategies for note taking, studying, memory and test taking.

## Information Processing and Communication Domains

- Provide explicit instruction in strategies for attending, organizing and remembering.

  - Teach and prompt active listening strategies, such as making connections with known information or personal experiences, asking clarifying questions, self-questioning and note taking.
  - Use graphic organizers to assist in organizing and remembering information.
  - Use techniques to emphasize patterns and the sequence of events or steps.
  - Provide opportunities for feedback to encourage the active use of memory strategies. Apply and adapt strategies for different content areas.

- Use teaching strategies that facilitate learning.
  - Activate prior knowledge; e.g., brainstorming and categorizing information into a semantic map, K-W-L: What I Know, What I Want to Know, What I Learned (Ogle, 1986).
  - Teach relevant vocabulary.
  - Provide organizational structures; e.g., graphic organizers that provide a visual display of relationships among concepts.
  - Provide opportunities for students to actively think about new information; e.g., Think-Pair-Share: individually think and make a list, map or diagram; pair up with a partner and add to the ideas generated individually; share these responses with the whole group (McTighe & Lyman, 1992).

## Social Domain

- Assist students in taking responsibility for their learning and their successes.
  - Provide specific feedback acknowledging students' roles in their successes.
  - Involve students in the IPP process, in transition planning, in setting goals, in assessment and in self-advocacy.
- Regularly acknowledge students' strengths.
- Model and teach prosocial skills.

## Academic Domain

**Literacy Instruction**

- Continue to develop students' automatic word recognition and fluency skills.
  - Organize frequent opportunities to practise reading authentic text at the independent level.
  - Provide modelling and feedback about word identification strategies.
- Explicitly teach reading comprehension strategies.
  - Teach a variety of strategies to use before, during and after reading; e.g., graphic and semantic organizers, K-W-L, question asking and answering, predicting, summarizing, using story mapping and text structure.
  - Emphasize comprehension monitoring; e.g., Does this make sense?
  - Provide cues to use strategies across curriculum materials to encourage generalization and transfer.
- Explicitly teach strategies for writing.
  - Demonstrate and model critical steps in planning, writing and revising.
  - Include specific instruction in spelling and punctuation.
  - Provide organizational frameworks; e.g., semantic maps, compare-contrast graphic organizers.
  - Include self-monitoring strategies; e.g., think sheets, mnemonics.
  - Ensure that students engage in frequent meaningful writing activities.

  (See the DEFENDS writing strategy, Appendix 16, pages 99–100.)
- Monitor student progress and provide more explicit, more intensive and more extensive instruction for students who continue to make slow progress in the acquisition of literacy skills.

**Mathematics Instruction**

- Teach specific math vocabulary.
- Model and demonstrate explicit steps for analyzing math problems, e.g., read for understanding, paraphrase, visualize, make a plan, estimate, compute, check.

- Use techniques to emphasize the sequence of steps.
- Provide frequent meaningful and engaging practice of skills to promote mastery.
- Highlight instructions or key words in instructions.
- Provide exemplars and models that students can use for reference.
- Provide modelling and cues for self-questioning and self-monitoring.
- Model and encourage frequent translation of math symbols and mathematical explanations into everyday language.
- Explicitly teach math study skills.
  - Demonstrate how to adapt text reading and memory strategies so that students are effective in dealing with the unique aspects of math textbooks and math content.
  - Provide practice in using memory and problem-solving strategies under safe "mock test" conditions.
  - Encourage self-analysis of text results to identify areas for further practice and more effective strategies.

## Junior High/Senior High School

Students with learning disabilities face complex challenges at the junior high and senior high school levels. Students' learning strengths and needs interact with the evolving demands of schooling which include increases in the workload, the complexity of curriculum demands, the speed of presentation of material, the volume of reading and writing, the abstractness of language and the demands on memory. There may be larger classes and many instructors with a wide range of expectations. Students are expected to be increasingly independent. The organizational structures and curriculum demands make it more difficult to individualize programming, and social and emotional factors have a significant impact.

In addition to programming considerations for students identified with learning disabilities during the elementary school years, it is important to have processes in place to identify students with learning disabilities in junior high and senior high school. Learning disabilities are lifelong and, for some students, their particular learning needs do not interfere with academic success until they face increasing demands in junior high or in senior high school. (See Identification and Assessment section, pages 17–21.)

Decisions made in the junior high/senior high school years have an impact on students' options as adults. Adolescents with learning disabilities need to have access to the highest academic challenges appropriate to their cognitive abilities. They should not be automatically assigned to lower-level courses. It is important not to underestimate students with learning disabilities and to maximize their opportunities for access to post-secondary programs. Although increasing numbers of students with learning disabilities are entering post-secondary institutions, they continue to be underrepresented. Employment trends indicate that 30 percent of all new jobs will be occupations requiring post-secondary education or technical and trades training, and a further 16 percent will require university degrees (Goodman, 2000).

- Maximize the benefits of educational programming in the junior high and senior high school years with particular emphasis on:
  - transition planning
  - meaningful parent involvement (with the gradual transfer of responsibility to students in senior high school)
  - self-advocacy
    - knowledge of learning strengths and needs
    - knowledge of effective accommodations
  - metacognitive skills: problem solving and higher order processing, self-management
  - continued development of literacy skills
  - content-area instruction with appropriate accommodations, assessment and instructional strategies
  - instructional strategies to facilitate learning: explicit direct instruction, strategy instruction and strategic teaching are all important in junior high and senior high school.

- Coordinate supports for students with learning disabilities.
  - Organize ongoing dynamic transition planning throughout junior high and senior high school.
  - Organize transitions from junior high to senior high school. The transfer of information about students is extremely important. Schedule transition planning meetings well before the transition to senior high school to provide students, parents and school personnel with key information to facilitate the continuity of programming and the successful adjustment to senior high school.
  - Designate a key contact person on staff to whom a student can go for assistance, who monitors student progress and coordinates the student's program. Some students need daily communication with a key contact person.
  - Organize the involvement of teachers in the IPP process. All teachers need to be aware of and implement appropriate instructional strategies and accommodations necessary for individual students.
  - Build in time for students to receive additional instruction/mentoring in literacy, learning and organizational strategies.
  - Collaborative teaming can facilitate the implementation of accommodations. For example, the school librarian may help find taped books and alternative materials at lower reading levels. Volunteers may read and scribe for students.
  - Consider the workload and students' areas of difficulty. Where possible, adjust students' timetables to balance the number of courses with heavy demands for reading and written assignments taken in a term.

- Support students as they take increasing responsibility for their learning.
  - Involve adolescents in all aspects of planning and implementing their instructional programs, including assessment, program planning, goal setting (IPP), selecting accommodations, monitoring, evaluation and transition planning.

- Involve students in selecting accommodations. Adolescents are sensitive to the reactions of their peers and prior discussion can help avoid embarrassment.
- Provide coaching and opportunities for self-advocacy, such as approaching a content-area teacher to discuss accommodations.
- Provide opportunities for students to try out accommodations and evaluate their effectiveness.
- Provide support in learning to use assistive technology, particularly computer technology. Keyboarding skills and basic word processing skills are important to success after senior high school.

## Metacognitive Domain

- Provide explicit instruction in strategies to enhance independent functioning, such as goal setting, note taking, studying, remembering, test taking, researching, self-management and self-monitoring.
- Provide instruction in classroom survival skills, such as attending class daily, arriving promptly, being prepared for daily lessons, meeting assignment deadlines, addressing teachers appropriately, and following written and oral directions.
- Collaborate to facilitate the development of learning and study strategies. Resource personnel and school librarians are key team members in supporting students. Communication with content-area teachers facilitates the transfer of strategies to the classroom. To enhance generalization, teach strategies explicitly to students, plan for practice in targeted classes, and provide positive and corrective feedback. (For an Assignment Completion checklist for use by students, see Appendix 17, page 101.)

## Information Processing and Communication Domains

- Use teaching strategies that facilitate learning.

- Model a problem-solving approach. For example, process skills in science can be presented as a sequence of problem-solving steps which are transferable to other academic areas.
- Activate prior knowledge and teach relevant vocabulary.
- Present information in a user-friendly way for students who have difficulty understanding and processing spoken language. Pair auditory information with visual information. Provide opportunities for discussion and note taking. Provide graphic organizers. Write key words on the board or an overhead. Encourage questions. (For more information on user-friendly presentations, see Appendix 18, page 102.)
- Provide explicit organizational structures to indicate goals of lessons and where the lesson fits in the context of the unit.
- Demonstrate organizational frameworks, note-taking strategies and memory techniques that are most appropriate for particular content areas. Assist students to adapt textbook reading and other strategies to be effective in particular subject areas. (For information on evaluating textbooks, see Appendix 19, pages 103–105.)

## Social Domain

- Demonstrate, model and provide opportunities for role-playing positive social interaction skills. The health curriculum provides a context for focusing on interpersonal skills.
- Assist students in taking responsibility for their learning and successes by involving them in the IPP process, transition planning, assessment and self-advocacy.

## Academic Domain

**Literacy Instruction**

- The need for literacy instruction continues into adolescence. Adolescents may need explicit instruction to learn how to:*
  - apply a variety of reading comprehension and study strategies
  - question themselves about what they are reading
  - synthesize information from various sources

* Adapted from David W. Moore et al., *Adolescent Literacy: A Position Statement* (Newark, DE: International Reading Association, 1988), p. 5. Reprinted with permission. Newark, DE: International Reading Association.

- identify, understand and remember key vocabulary
- recognize and use a text's organizational structure
- organize information in notes
- interpret diverse symbol systems; e.g., in biology and algebra
- search the Internet for information
- judge their own understanding
- evaluate the ideas and perspectives of authors.

• Provide explicit modelling and instruction in written language.

- Provide exemplars and clear specific criteria for written assignments. Performance assessment approaches and rubrics help students develop self-monitoring skills.
- Teach explicit strategies for planning written assignments, and provide planning frameworks for different types of narrative and expository writing.
- Identify and provide accommodations as necessary. Many students with learning disabilities require extra time for tests and assignments that require reading and writing. Scribes, readers, taped questions and answers may be appropriate. Access to a computer with word processing features, such as grammar checkers, spell checkers and a read-back function for editing written work may be needed. Encourage keyboarding skills. (See the DEFENDS writing strategy, Appendix 16, pages 99–100.)

**Mathematics Instruction**

• As adolescents are given more responsibility for preparing for tests, they continue to need explicit instruction in math study skills.

- Demonstrate methods for understanding and mastering math vocabulary; e.g., use of math vocabulary section in math binder, use of glossary or math dictionary, creating study cards.
- Highlight key terms used in instructions on math assignments and tests; e.g., "evaluate," "factor fully."
- Provide and encourage practice in using memory and problem-solving strategies under safe "mock test" conditions.
- Encourage self-analysis of test results to identify areas for further practice and more effective strategies.

- Provide explicit modelling and instruction for mathematical literacy and skill development.
  - Model and encourage frequent translation of math symbols and mathematical explanations into everyday language.
  - Model thinking processes and strategies used in approaching math questions and word problems.
  - Provide exemplars and models that students can use for reference.
  - Encourage discussion about the application of math skills and frequent meaningful applied math activities.
  - Identify and provide accommodations as necessary, such as extra time for completion of math tests, a reader for word problems or test instructions, use of a calculator or times table chart for basic skills when basic skills are not being tested; e.g., for completing algebra questions.

## Outcomes

The outcomes below describe potential results from implementing the strategies, activities and practices in this section.

- Students use metacognitive strategies in learning and social situations.
- Students have access to the highest academic challenges appropriate to their cognitive abilities.
- A range of instructional strategies is used to meet individual student needs across levels of schooling.
- A flexible approach to organizing for instruction is employed across levels of schooling.
- Students develop literacy skills.

- Students are successful in acquiring and demonstrating knowledge in content areas.

## Connections to Other Alberta Learning Resources

- See the following pages in *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series:
  - Strategies and Components of a Strategies Lesson, pages LD.91–LD.94
  - Metacognitive Domain, pages LD.101–LD.115
  - Information Processing Domain, pages LD.125–LD.145
  - Communication Domain, pages LD.146–LD.150
  - Academic Domain, pages LD.131–LD.199
  - Social/Adaptive Domain, pages LD.200–LD.215.

- See the following pages in *Teaching for Student Differences* (Alberta Education, 1995), Book 1 in the *Programming for Students with Special Needs* series:
  - General Adaptations and Adaptive Techniques, Language Arts, Mathematics, pages TSD.18–TSD.30
  - Strategies by Categories of Differences, Learning Disabilities, pages TSD.31–TSD.42
  - Strategies by Categories of Differences, Managing Behaviours in the Classroom, pages TSD.43–TSD.48
  - Prosocial Skills, pages TSD.5–TSD.7.

- See *Make School Work for You: A Resource for Junior and Senior High Students who Want to be More Successful Learners* (Alberta Learning, 2001) and *Teacher Implementation Guide for Make School Work for You* (Alberta Learning, 2001).

# APPENDICES

## Appendix I: Problem-solving Worksheet

Resource Teacher _____ Student Name _____

Classroom Teacher _____ Date _____

Problem:

Details:

| Possible solutions | Potential results of this solution |
|---|---|
| 1. _____ → | |
| 2. _____ → | |
| 3. _____ → | |

Solution to try first:

## Appendix I (continued): Action Plan

| What we will do | When | Who |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

How will we monitor the plan?

How will we evaluate progress? (How will we know if and when the plan is successful?)

**Date and time of next meeting or review:**

## Appendix 2: Questions Frequently Asked by Parents of Children with Learning Disabilities*

- What is your understanding of my child's IPP goals and objectives?
- What is your understanding of my child's learning strengths and needs? How will this affect his or her learning and participation in your course?
- What kinds of accommodations will be available in your classroom?
- Are there guidance counsellors or resource personnel who can provide additional information and consultation on program planning for my child?
- How will you be participating in the IPP process?
- How will you be assessing my child's progress and understanding of concepts in your content area?
- Will you be adjusting how marks are awarded for the course? If so, will this affect my child's ability to move into the next level of this content area?
- Do you provide rubrics for major assignments? Do you have samples that students could use as models?
- What learning strategies are students learning in your classroom?
- What are some ways that we can help at home? How can we reinforce the strategies my child is learning and using in class?
- How can we stay in touch so that I can support the work you are doing in the classroom? What is the best way to reach you?
- Can you suggest resources and other references that would reinforce the concepts my child is currently learning?
- Based on what you have learned about my child this semester, what suggestions do you have for next year's teacher?

* From Calgary Learning Centre (Calgary, AB)

## Appendix 3: Tips for Parents on Explaining a Learning Disability to a Child*

PARENTAL Tips

- Emphasize the positive—stress the child's strengths (mathematics, art, music, sports).
- Explain that each person learns at his or her own speed, in his or her own way. Some children learn best by hearing material presented to them, while others prefer to read or look at what they are expected to learn.
- Use terms and language the child will understand. For a child 7–9 years, the diagnosis of a learning disability may be explained in the following manner: "Your brain is like a radio with too much noise. We have to tune in the way you learn, just like we tune in the music clearly."
- If the parent experienced learning problems as a child, he or she may mention this as an example of how difficulties can be overcome.
- Stress that the child is not alone with his or her problems. Let it be known that the parents, grandparents, siblings and teachers will all assist in helping the child be as successful as possible.
- Describe the academic assistance the child will be receiving in a concrete, realistic, positive manner.
- Elicit the teacher's assistance in finding coping and time-management strategies to assist the child with homework. Employ the same techniques used in the classroom so the child will see improvement more quickly and experience success and increased self-esteem.
- Discuss ideas for handling possible teasing from peers. For a child 7–9 years, role-play responses, such as, "I need extra help for spelling but reading is easy for me."
- Seek resources to provide support and information. Help the child access these and become a personal advocate for his or her education.
- Encourage the child to be an active participant in planning his or her education program by participating in IPP conferences and setting realistic long-range goals as he or she progresses in school. The child should be reminded that a full range of opportunities is available to individuals with learning disabilities.

*Adapted with permission from Diane Knight, "Families of Students with Learning Disabilities," in William N. Bender (ed.), *Professional Issues in Learning Disabilities: Practical Strategies and Relevant Research Findings* (Austin, TX: Pro-Ed, 1989), p. 277.

## Appendix 4: **What to Look For:** Some First Signs of Trouble Keeping Up with the Flow of Expectations*

| | Language | Memory | Attention | Fine Motor Skill | Other Functions |
|---|---|---|---|---|---|
| **Preschool** | Pronunciation problems<br><br>Slow vocabulary growth<br><br>Lack of interest in storytelling | Trouble learning numbers, alphabet, days of the week<br><br>Poor memory for routines | Trouble sitting still<br><br>Extreme restlessness<br><br>Impersistence at tasks | Trouble learning self-help skills, e.g., tying shoe laces<br><br>Clumsiness<br><br>Reluctance to draw or trace | Trouble learning left from right (possible visual spatial confusion)<br><br>Trouble interacting (weak social skills) |
| **Lower Grades** | Delayed decoding abilities for reading | Slow recall of facts<br><br>Organizational problems<br><br>Slow acquisition of new skills<br><br>Poor spelling | Impulsivity, lack of planning<br><br>Careless errors<br><br>Insatiability<br><br>Distractibility | Unstable pencil grip<br><br>Trouble with letter formation | Trouble learning about time (temporal-sequential disorganization)<br><br>Poor grasp of math facts |
| **Middle Grades** | Poor reading comprehension<br><br>Lack of verbal participation in class<br><br>Trouble with word problems | Poor, illegible writing<br><br>Slow or poor recall of math facts<br><br>Failure of automatic recall | Inconsistency<br><br>Poor self-monitoring<br><br>Great knowledge of trivia<br><br>Distaste for fine detail | Fist-like or tight pencil grip<br><br>Illegible, slow or inconsistent writing<br><br>Reluctance to write | Poor learning strategies<br><br>Disorganization in time and space<br><br>Peer rejection |

* Reproduced with permission from Melvin D. Levine, "Learning Disorders and the Flow of Expectations," *LDOnline*, 1990, http://www.ldonline.org/ld_indepth/general_info/gen-1.html (March 2, 2001).

Appendix 4 (continued):

| | Language | Memory | Attention | Fine Motor Skill | Other Functions |
|---|---|---|---|---|---|
| **Upper Grades** | Weak grasp of explanations<br><br>Foreign language problems<br><br>Poor written expression<br><br>Trouble summarizing | Trouble studying for tests<br><br>Weak cumulative memory<br><br>Slow work pace | Memory problems due to weak attention<br><br>Mental fatigue | (Lessening relevance of fine motor skills) | Poor grasp of abstract concepts<br><br>Failure to elaborate<br><br>Trouble taking tests, multiple choice |

## Appendix 5: Writing Self-assessment*

**PART 1: Content**

After proofreading and editing your writing, complete these sentence starters to assess your writing.

The purpose of this assignment was _____

_____

The assignment needed to be _____

_____

The format I chose to write was _____

The topic I wrote about is _____

One important thing to notice about my writing is _____

_____

because _____

I would recommend _____ read my piece of writing because

_____

**PART 2: Organization**

After proofreading and editing your writing, complete these sentence starters to assess your writing.

At the beginning of my piece of writing, I wrote _____

_____

I thought it was effective because _____

_____

The middle of my piece of writing focused on _____

_____

It made sense when I wrote _____

_____

One thing that I could improve in this piece of writing is _____

_____

* Adapted with permission from Karen L. Vavra (Calgary, AB: The Calgary Learning Centre)

**Appendix 5 (continued):**

To improve it, I would need to _____

_____

One interesting detail that I included in my writing was _____

_____

At the end of my writing I _____

_____

The ending was effective because _____

_____

**PART 3: Vocabulary**

After proofreading and editing your writing, complete these sentence starters to assess your writing.

Three descriptive words or phrases that I used to create a vivid image for the reader are:

1. _____
2. _____
3. _____

One place that I added descriptive details to "show rather than tell" in my writing is _____

_____

I checked my writing for "over-used" words and found that _____

_____

I made my writing better by _____

_____

**PART 4: Sentence Structure**

I have read my writing aloud to check that each sentence sounds right and makes sense. I have checked my writing for the following:

- ☐ Run-on sentences (too many "ands")
- ☐ Sentence fragments (incomplete sentences)

**Appendix 5 (continued):**

One of the most interesting sentences in my writing is _____

_____

I used a variety of ways to begin my sentences. Three different ways that I started a sentence are:

1. _____
2. _____
3. _____

**PART 3: Mechanics**

After proofreading and editing your writing, complete these sentence starters to assess your writing.

I have used a _____ coloured pen to edit my writing to correct the following:

- Punctuation
  - ☐ **periods** at the end of each sentence
  - ☐ **question marks** at the end of each question
  - ☐ **exclamation marks** at the end of sentences to show emotion
  - ☐ **quotation marks** around the words that a speaker says
  - ☐ **commas** after a list of items and to separate the speaker from the quotation.

- Capital letters
  - ☐ names of people ☐ places ☐ months of the year
  - ☐ days of the week ☐ holidays ☐ titles of books or movies

Some of the spelling changes that I made are:

| *My Spelling* | *Corrections* |
|---|---|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |
| 5. _____ | 5. _____ |

I have checked the appearance of this piece of writing.

It is legible and easy to read. ☐ Yes ☐ Not yet

## Appendix 6: Observation Guide: Student Reading*

**When observing a student's reading, you may want to check for the following.**

- Does the student use any pre-reading activities: e.g., look at title, look at pictures, skim the page?
- Does the student hesitate to begin?
- Does the student appear comfortable reading? Is the student easily frustrated?
- Do the student's eye or head movements suggest a lot of backtracking when reading?
- Does the student squint or keep the book close to his or her face?
- Does the student use a finger or pencil for tracking?
- Does the student have difficulty with basic reading skills: sight vocabulary, decoding skills?
- What types of words are recognized/not recognized?
- What aspects of decoding are difficult for the student?
- What does the student do when encountering a word he or she doesn't know: Substitute another word? Sound it out? Skip it?
- Are miscues grammatically correct? For example, if the student misreads a word, is it the proper tense?
- Does the student leave out or change words?
- Is the student reading for meaning?
- Does the student replace the correct word with a different word that maintains meaning or one that looks similar but has a different meaning?
- Are words read in a monotone, without intonation?
- Are words phrased appropriately?
- Does the student self-correct without prompting?

* Adapted with permission from The Learning Centre–Calgary and Alberta Vocational College–Calgary. *Asking the Right Questions: Assessment and Program Planning for Adults with Learning Difficulties (revised edition)* (Calgary, AB: The Learning Centre–Calgary and Alberta Vocational College–Calgary, 1995), p. 110.

## Appendix 7: Goal Setting—Parent Form*

▶ Dear Parents,

You are important members of the learning team! Please complete this goal-setting form and we will use it for planning and discussion at our parent-teacher conference. Thank you.

Student Name: _____

School: _____

### Our child has these five **strengths**:

1. _____
2. _____
3. _____
4. _____
5. _____

### Our child has these five areas of **need**:

1. _____
2. _____
3. _____
4. _____
5. _____

* From Catherine Walker (Edmonton, AB: Smart Learning, 1993).

**Appendix 7 (continued):**

A. Our first goal for our child this school year is:

_____

_____

This is what we will do at home to help achieve this goal:

1. _____

2. _____

3. _____

B. Our second goal for our child this school year is:

_____

_____

This is what we will do at home to help achieve this goal:

1. _____

2. _____

3. _____

**I agree to review these goals at each reporting period.**

_____ _____

Parent's Signature Date

☐ I need more information! Please send home a sample of what a completed family goal sheet might look like.

☐ I need more ideas. Let's work on this together at the parent-teacher conference.

☐ I do not wish to participate in family goal setting this school year.

**Please return to the school by:**

## Appendix 8: Helping Students Communicate in the IPP Process*

**IPLAN** is a strategy that helps students focus on effective planning and communication.

**I** Inventory your strengths, areas you need to improve, goals and interests, and choices for learning.

**P** Provide your inventory information.

**L** Listen and respond.

**A** Ask questions.

**N** Name your goals.

**SHARE** is a strategy that helps students focus on appropriate behaviours for effective communication.

**S** Sit up straight.

**H** Have a pleasant tone of voice.

**A** Activate your thinking.

**R** Relax.

**E** Engage in eye contact.

* Adapted from "IPLAN: Helping Students Communicate in Planning Conferences" by Anthony K. Van Reusen and Candace S. Bos, *Teaching Exceptional Children*, 22, 4, 1990, pp. 30, 31. Copyright 1990 by The Council for Exceptional Children. Adapted with permission.

## Appendix 9: Student Action Plan for Transitions*

**In order to reach my goals...**

What needs to take place immediately—within the next month

What needs to take place down the road—within the next 3–6 months

| Immediate Steps | Who | By When | Outcome |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

| Down the Road | Who | By When | Outcome |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

* Adapted with permission from Gary M. Clark, *Assessment for Transitions Planning* (Austin, TX: Pro-Ed, 1998), p. 105.

## Appendix 10: Transition Checklist*

(From senior high school to post-secondary school)

This transition checklist is not only intended to be used at the completion of senior high school, but to serve as a guide to the types of activities that the student should be engaged in during senior high school.

- ☐ I have an updated copy of my last educational assessment.
- ☐ I have a copy of my most recent individualized program plan.
- ☐ I have copies of my transcripts.
- ☐ I have any pertinent medical information I need to share.
- ☐ I have contacted the special needs offices of the institutions I am considering.
- ☐ I have prepared a set of questions to ask regarding accommodations for my specific needs at these institutions.
- ☐ I have the addresses and phone numbers of the people who have provided assessment of my specific needs.
- ☐ I have a record of the assistive technology that has been previously provided.
- ☐ I have checked the accommodation policies of the institutions I am considering.
- ☐ I have prepared a list/inventory of my successes and accomplishments at school and in the community.
- ☐ I have a summary of career searches/exploration I have completed.
- ☐ I have visited the campuses (electronically or in person) of the institutions I am considering.
- ☐ I have researched funding sources and financial assistance opportunities.
- ☐ I have completed the goals of my transition plan.

* Reproduced with permission from Calgary Learning Centre (Calgary, AB).

## Appendix II: Self-advocacy Checklist for Elementary/Middle School*

- ☐ I know what kind of LD I have.
- ☐ I can describe my LD to my teacher.
- ☐ I am attending my IPP meetings.
- ☐ I let people know what I am thinking at my IPP meetings.
- ☐ I ask for help when I need it.
- ☐ I ask questions in class.
- ☐ I have started to take on more difficult tasks in school.
- ☐ I hand in all my homework on time.
- ☐ I am proud of myself and don't let others tease me.
- ☐ My calendar, binder and notebooks are organized.
- ☐ I have learned new ways to study for tests.
- ☐ I make an effort to build good friendships.
- ☐ I have a tutor for the subject(s) that I find difficult.
- ☐ I have gone to my senior high school and talked to my teachers.
- ☐ I am learning new strategies and using accommodations.

* Adapted with permission from Howard Eaton and Leslie Coull, *Transitions to High School: Self-Advocacy Handbook for Students with Learning Disabilities and/or Attention Deficit Hyperactivity Disorder* (Vancouver, BC: Eaton Coull Learning Group, Ltd., www.eclg.com, 2000), p. 57.

## Appendix 12: Asking for Help*

Dear _____,
(teacher's name)

These are the things that I am having trouble with:

- ❑ understanding my textbook
- ❑ knowing what my homework is
- ❑ getting my homework done
- ❑ listening in class
- ❑ taking notes
- ❑ passing tests
- ❑ completing assignments
- ❑ other _____

Could we please meet to discuss possible strategies?

**Date of Meeting:** _____

**Student signature:** _____

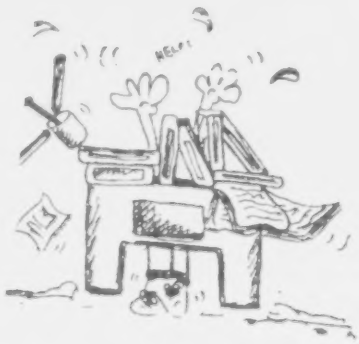
* Reproduced with permission from Mary Cole and Anne Price, *TNT: Tips 'n Tricks for Dynamite Learning!!* (Calgary, AB: Calgary Learning Centre, 1999), p. 28.

## Appendix 12 (continued): Practising "I" Messages*

Before you meet with your teacher, role-play what you will say — have an adult partner act as your teacher.

Practise "I" messages because it is too easy to use words that seem to blame your teacher.

For example:




DO SAY: "I have trouble listening in class."

DON'T SAY: "You talk too fast!"

DO SAY: "I find it hard to do well on tests."

DON'T SAY: "You make the tests too hard!"

DO SAY: "I have difficulty knowing what to do for homework."

DON'T SAY: "You say what's for homework too fast and I can't get it down!"

* Adapted with permission from Mary Cole and Anne Price, *TNT: Tips 'n Tricks for Dynamite Learning!!* (Calgary, AB: Calgary Learning Centre, 1999), p. 29.

## Appendix 12 (continued): Making an Action Plan*

**SUBJECT:**

Student: _____ Teacher: _____

**Target:**

**Strategies I will try:**

1. _____
2. _____

**Other helpful strategies:**

1. _____
2. _____

**Target:**

**Strategies I will try:**

1. _____
2. _____

**Other helpful strategies:**

1. _____
2. _____

* Reproduced with permission from Mary Cole and Anne Price, *TNT: Tips 'n Tricks for Dynamite Learning!!* (Calgary, AB: Calgary Learning Centre, 1999), p. 30.

# Appendix 13: List of Possible Accommodations*

## Reading Difficulties

- Use less difficult or alternative reading material within a subject area.
- Reduce the amount of reading required.
- Allow students to tape record lectures and class discussions.
- Allow alternative methods of data collection; e.g., tape recorders, dictation, interviews, fact sheets.
- Set time limits for specific task completion.
- Enlarge text of worksheets and reading material.
- Extend time to complete tests and assignments.
- Use large-print editions of tests.
- Read directions aloud to students.
- Read test items aloud to students.
- Read standard directions several times at start of exams.
- Record directions on audiocassette.
- Provide written directions for exams ahead of time.
- Use assistive technology; e.g., optical character recognition systems, books on tape/CD, screen readers.

## Written Expression Difficulties

- Allow students to tape record lectures and class discussions.
- Provide written outlines.
- Individualize assignments; e.g., reduce volume of work, break long-term assignments into manageable tasks, allow extra time for completing assignments, offer alternative assignments, allow students to work on homework while at school.
- Allow alternative methods of data collection; e.g., tape recorders, dictation, interviews, fact sheets.
- Allow for spelling errors on written assignments.

* From Calgary Learning Centre (Calgary, AB).

**Appendix 13 (continued):**

- Extend time to complete tests and assignments.
- Permit use of scribes or tape recorders for answers (student should include specific instructions about punctuation and paragraphing).
- Waive spelling, punctuation and paragraphing requirements.
- Accept keyword responses instead of complete sentences.
- Use assistive technology; e.g., word processors, spell checkers, grammar checkers, text to speech software.

## Attention Difficulties

- Provide alternative seating; e.g., near teacher, facing teacher, at front of class, between well-focused students, away from distractions.
- Provide additional/personal work space; e.g., quiet area for study, extra seat or table, time-out spot, study carrels.
- Permit movement during class activities and testing sessions.
- Allow students to tape record lectures and class discussions.
- Provide directions in written form; e.g., on board, on worksheets, copied in assignment book by students.
- Set time limits for specific task completion.
- Extend time to complete tests and assignments.
- Allow untimed testing sessions.
- Use multiple testing sessions for comprehensive tests.
- Allow students to take breaks during tests.
- Use place markers, special paper, graph paper or writing templates to allow students to maintain position better or focus attention.
- Provide cues; e.g., arrows, stop signs on test answer forms.
- Provide a quiet, distraction-free area for testing.
- Allow students to wear noise buffer/device to screen out distracting sounds.
- Provide checklists for long, detailed assignments.
- Provide a specific procedure/process for turning in completed assignments.

Appendix 13 (continued):

## Memory Difficulties

- Provide written outlines.
- Provide directions in written form; e.g., on board, on worksheets, copied in assignment book by students.
- Provide a specific procedure/process for turning in completed assignments.
- Provide checklists for long, detailed assignments.
- Read standard directions several times at start of exams.
- Provide cues; e.g., arrows, stop signs on answer forms.
- Allow students to use response aids; e.g., arithmetic tables, dictionaries, calculators, word processors, spell checkers, grammar checkers.

## Fine and Gross Motor Difficulties

- Use assistive and adaptive devices; e.g., slantboards/desktop easels to display written work/reading material, pencil/pen adapted in size or grip diameter, alternative keyboards, portable word processors.
- Set realistic and mutually agreed-upon expectations for neatness.
- Reduce/eliminate the need to copy from a text or board; e.g., provide copies of notes, permit students to photocopy a peer's notes, provide carbon/no carbon required (NCR) paper to a peer to make a duplicate copy of notes.
- Extend time to complete tests and assignments.
- Alter the size, shape or location of the space provided for answers.
- Accept keyword responses instead of complete sentences.
- Allow students to type answers or answer orally instead of in writing.

## Appendix 14: Examples of Assistive Technology Adaptations*

| Disability | Adaptations | Description |
|---|---|---|
| **Reading** | • Tape-recorded material | • Audio recordings of textbook material and answers to chapter or workbook questions |
| | • Semantic mapping software | • Software that enables readers to comprehend narrative stories or expository writing elements through graphic depiction |
| | • Electronic word recognition and definition | • Presents definitions of words |
| | • Closed-circuit television | • Magnifies reading material; limited reading presented at once |
| | • Speech synthesizer/screen reader software | • Computerized voice reads material on computer monitor |
| | • Optical character recognition (OCR)/scanner | • Text is scanned into computer and OCR system computerizes text so it can read by speech synthesis |
| **Written expression** | • Pencil grip | • Piece of plastic that is attached where the pencil is grasped |
| | • Alternative-hardware input devices | • "Stickie keys," touch screens, trackballs, customized keyboards |
| | • Semantic mapping software | • Software for outlining and organizing writing |
| | • Tape recorder | • Standard tape recorder for dictation of written products |
| | • Word prediction software | • Software that assists with sentence structure and syntax |
| | • Speech recognition | • Voice recognition enabling dictation of written content |
| | • Electronic spell checkers | • Devices that speak and display, or only display, words and definitions |
| | • Word processing/ spell check option | • Standard spell check option |
| | • Speech synthesizer/talking software | • Speech synthesis with word processing program |

* Adapted from "Using Assistive Technology Adaptations to Include Students with Learning Disabilities in Cooperative Learning Activities" by D. P. Bryant and B. R. Bryant, 1998, *Journal of Learning Disabilities, 31*, 1, p. 48. Copyright (1998) by PRO-ED, Inc. Adapted with permission.

Appendix 14 (continued):

| Disability | Adaptations | Description |
|---|---|---|
| Mathematics | • Graph paper | • Centimetre squares for aligning numbers |
| | • Calculators | • Devices for checking answers, talking calculators, large keyed calculators |
| | • Talking clocks | • Specially designed clocks that tell time verbally |
| | • Timing devices | • Various devices for monitoring time |

## Appendix 15: Student's Guide to Problem Solving*

1. What is the **problem**? (describe the situation)

_____

_____

2. What could I do to **solve the problem**? (possible solutions/ideas)

_____

_____

3. **Potential consequences** of my ideas.

Idea #1 Good outcomes _____

Not-so-good outcomes _____

Idea #2 Good outcomes _____

Not-so-good outcomes _____

4. **What is my plan?**

a) **What** is my best solution/idea? _____

_____

b) **What** do I need to make it work? (materials, information)

_____

c) **When** will I do this? _____

_____

d) **What** will I do **first**? _____ **second?** _____

**third?** _____ **fourth?** _____

5. **How will I know** if my plan worked? (What outcomes am I looking for?)

_____

_____

* Reproduced with permission from Mary Cole and Anne Price, *TNT: Tips 'n Tricks for Dynamite Learning!!* (Calgary, AB: Calgary Learning Centre, 1999), p. iv.

## Appendix 16: DEFENDS Writing Strategy*

**Decide on goals and theme.**

Decide who will read this and what you hope will happen when they do.

Decide what kind of information you need to communicate.

Decide what your theme is.

Note the theme on your planning form.

**Estimate main ideas and details.**

Think of at least two main ideas that will explain your theme.

Make sure the main ideas are different.

Note the main ideas on your planning form.

Note at least three details that can be used to explain each main idea.

**Figure best order of main ideas and details.**

Decide which main idea to write about first, second and so forth, and note on the planning form.

For each main idea, note on the planning form the best order for presenting the details.

Make sure the orders are logical.

**Express the theme in the first sentence.**

State in the first sentence of your essay what the essay is about.

**Note each main idea and supporting points.**

Note your first main idea using a complete sentence. Explain this main idea using the details you ordered earlier.

Tell yourself positive statements about your writing and tell yourself to write more.

Repeat for each of the other main ideas.

* Figure adapted from "Adolescents with Learning Disabilities" by Edwin S. Ellis and Patricia Friend in *Learning About Learning Disabilities* (p. 527), edited by Bernice Y. L. Wong, copyright 1991, Elsevier Science (USA), reproduced with the permission from the publisher.

**Appendix 16 (continued):**

▼

**Drive home the message in the last sentence.**

In the last sentence, restate what your theme is about.

Make sure you use wording different from the first sentence.

▼

**Search for errors and correct.**

Look for different kinds of errors in your essay and correct them.

▼

**S**et editing goals.

**E**xamine your essay to see if it makes sense.

**A**sk yourself whether your message will be clear to others.

**R**eveal picky errors (capitalization, punctuation, spelling, etc.).

**C**opy over neatly.

**H**ave a last look for errors.

## Appendix 17: Assignment Completion Strategy*

### Step 1: Psych Up

- ☐ Prepare your forms.
- ☐ Prepare your mind.

### Step 2: Record and Ask

- ☐ Write the assignment using abbreviations.
- ☐ Think about it.
- ☐ Ask questions.

### Step 3: Organize

- ☐ Break the assignment into parts.
- ☐ Estimate the number of study sessions.
- ☐ Schedule the sessions.
- ☐ Take your materials home.

### Step 4: Jump to It

- ☐ Take control.
- ☐ Take materials to your study spot.
- ☐ Tell others about your plan.
- ☐ Survey the assignment.
- ☐ Set goals.
- ☐ Set up a reward.

### Step 5: Engage in the Work

- ☐ Follow the instructions.
- ☐ Note any questions.
- ☐ Get help if you need it.

### Step 6: Check the Work

- ☐ Check the requirements.
- ☐ Check the quality.
- ☐ Store the assignment.
- ☐ Reward yourself.

### Step 7: Turn It In

- ☐ Take it to class.
- ☐ Listen for and follow instructions.
- ☐ Record the date.
- ☐ Praise the effort.

### Step 8: Set Your Course

- ☐ Record your grade.
- ☐ Evaluate your assignment.
- ☐ Think about future goals.

* Reproduced with permission from Joyce A. Rademacher, "Enhancing Assignment Completion for Academically Diverse Learners," in Donald D. Deshler et al. (eds.), *Teaching Every Adolescent Every Day: Learning in Diverse Middle and High School Classrooms* (Cambridge, MA: Brookline Books, Inc., 1998), p. 197.

## Appendix 18: Listen Up*

**Do you help your listeners?**
**Are your presentations "listener-friendly?"**

| Usually | Sometimes | Never | |
|---|---|---|---|
| ☐ | ☐ | ☐ | 1. I reduce distractions. |
| ☐ | ☐ | ☐ | 2. I use advance organizers. |
| ☐ | ☐ | ☐ | 3. I base my presentation on the advance organizer. |
| ☐ | ☐ | ☐ | 4. I encourage recall of previously presented information; e.g., summarize, ask questions, allow listeners time to review previous notes. |
| ☐ | ☐ | ☐ | 5. I provide listeners with a listening guide; e.g., outline, major concepts, space to fill in notes. |
| ☐ | ☐ | ☐ | 6. I use cue words/phrases to signal important information; e.g., In summary, note the following, record this. |
| ☐ | ☐ | ☐ | 7. I emphasize words to cue/signal organization of information; e.g., first, second, third; if/then; before/after; next; finally. |
| ☐ | ☐ | ☐ | 8. I vary my tone and pace to emphasize important ideas. |
| ☐ | ☐ | ☐ | 9. I repeat important ideas or concepts. |
| ☐ | ☐ | ☐ | 10. I write important ideas on the board. |
| ☐ | ☐ | ☐ | 11. I write technical terms on the board. |
| ☐ | ☐ | ☐ | 12. I use visual aids; e.g., pictures, diagrams, overhead projector. |
| ☐ | ☐ | ☐ | 13. I provide examples and nonexamples of concepts. |
| ☐ | ☐ | ☐ | 14. I "talk comprehension"; e.g., ask questions during the presentation that require listeners to relate new information to old information, ask questions to check comprehension. |
| ☐ | ☐ | ☐ | 15. I encourage questions from listeners. |
| ☐ | ☐ | ☐ | 16. I provide opportunities for listeners to break into small groups to discuss concepts. |
| ☐ | ☐ | ☐ | 17. I allow time for reflection at the end of a presentation; e.g., review notes, summarize, ask questions. |
| ☐ | ☐ | ☐ | 18. I communicate enthusiasm for the topic. |

* From Anne Price (Calgary, AB: The Calgary Learning Centre, 1995)

## Appendix 19: Checklist for Evaluating Textbooks*

Title: _____ Author: _____

Publisher: _____ Copyright date: _____

Use this scale to rate the text features 1 2 3 4 5

1 = Poor / Inconsiderate

5 = Very Good / Considerate

### Look at the whole book

#### Appearance

_____ Is it interesting looking? Will students want to open it? Keep it open?

_____ Does it make ample use of space? Have large margins? Do pages appear crowded?

_____ Does it make effective use of colour (coloured visuals, headings, etc.)?

_____ Is print size appropriate (too small—cramped look; difficult to read; too large—babyish, may embarrass students)?

#### Content

_____ Does the overall content reflect what you believe are important concepts?

_____ Can you identify easily what the book is about by reading chapter concepts?

_____ Is the content up-to-date and relevant to needs of your students?

#### Organizational features

_____ Is the content of chapters organized logically?

_____ Can you easily identify what the book is about by reading chapter titles?

_____ Do the chapter titles reflect a logical organization of the content of the book?

_____ Does the book contain helpful table of contents, index, glossary and appendices?

* From "Reading Strategy Instruction" by Edwin S. Ellis, in Donald D. Deshler, Edwin S. Ellis and B. Keith Lenz (eds.), *Teaching Adolescents with Learning Disabilities: Strategies and Methods*, 2nd ed. (Denver, CO: Love Publishing Co., 1996), p. 119. Reproduced by permission of Love Publishing Company.

**Appendix 19 (continued):**

## Look at the way the book is written

### Language

_____ Is the language clear and readable?

_____ Do ideas flow together well or are they presented in a choppy, list-like format?

_____ Is the level of vocabulary appropriate for the background of your students?

_____ Is the level of sentence complexity appropriate for your students?

_____ Is the length of paragraphs appropriate for your students?

_____ Does the text clearly link pronouns to referents, and place subjects and verbs near the beginnings of sentences?

_____ Does the text stick to the topic and avoid irrelevant details?

### Level of knowledge

_____ Are the assumptions about prior knowledge of the content appropriate for your students?

_____ Is new vocabulary introduced using direct definitions, examples and nonexamples?

_____ Is the vocabulary density (percent of difficult words) appropriate for your students?

_____ Are new concepts explained clearly using concrete examples that link the concepts to what students already know?

### Metacognitive dimension

_____ Does the chapter provide cues for the reader to activate background knowledge?

_____ Does the prose contain strategy cues (cues to visualize, predict, link to background knowledge, summarize, generate questions, etc.)?

_____ Does the prose contain "meta-discourse," or cues to think ahead, during and back?

**Appendix 19 (continued):**

### Personalizing

_____ Does the text use active verbs and personal pronouns, such as you, we and us, to involve students in the content?

_____ Does the text relate the content to students' lives?

_____ Does the text provide positive models for both sexes and for different ethnic or cultural groups?

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# Feedback

## Unlocking Potential: Key Components of Programming for Students with Learning Disabilities

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